

Watchung

SOMERSET COUNTY, NEW JERSEY

Open Space and Recreation Plan

JUNE 2006

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Watchung

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Table of Contents

1	Executive Summary
5	Introduction
11	Open Space Plan Vision and Intent
13	Open Space Plan Goals & Objectives
17	Public Participation
18	Relationship to Other Plans
30	Existing Open Space Resources Designated Resources
40	Environmental Resource Inventory Natural Resources Historic and Cultural Resources Scenic Resources
83	Open Space Needs Assessment
86	Opportunities
90	Constraints
93	Open Space and Recreation Plan Open Space Acquisitions Implementation Matrix
116	Implementation Tool NJDEP Green Acres Matching Funds Funding Matrix by type of Open Space
120	Appendix Brownfields

Executive Summary

The Borough of Watchung Open Space and Recreation Plan is a well-organized program to identify, prioritize, enhance and preserve critical open space within the Borough. This plan will serve as the framework for moving forward with a proactive agenda for meeting all of the open space and recreational needs of Watchung's citizens and will be another key element in the continuing application of Smart Growth principles guiding Watchung.

Watchung Borough is approximately 6 square miles in size and is primarily a residential Borough that is almost fully developed. The Borough borders on Union County and is bounded by the Township of Berkeley Heights in Union County to the north, Scotch Plains Township in Union County to the east, Warren Township to the west and North Plainfield Borough, Green Brook Township and the City of Plainfield in Union County to the south.

The population of Watchung Borough has increased slightly from 5,110 in 1990 to 5,613 in 2000. The 2000 median age in Watchung Borough was 43 years, which was older than the Somerset County median age of 37.2 years. The average household size has dropped slightly over the past decade from 2.88 persons in 1990 to 2.62 persons in 2000.

Executive Summary

There are a total of 109.88 acres of publicly-owned open space in Watchung Borough. Of these, the Borough of Watchung owns 67.13 acres and 6.82 acres are owned by Somerset County. There are 1.63 acres of Open Space in State ownership through the DOT and 3.83 acres under Union County Park Commission ownership in the County. There are also 30.47 acres of recreational open space owned by the Watchung Board of Education.

Watchung is a community that is nearly entirely developed. The New Jersey Open Space and Outdoor Recreation Plan recommends 3% of net developable area be set-aside for Municipal Open Space and that 7% of developed and developable land be used for County Parkland. This would set a goal of 95 acres of municipal open space for Watchung Borough. Using this calculation, Watchung Borough has a total deficit of 28.09 acres, since the Borough currently holds 67.13 acres as open space. However, the Watchung Board of Education currently holds 30.47 acres of active recreation lands available for public use. As long as these lands remain available for public use, the Borough would have 97.6 acres of open space, exceeding the state standard for municipal open space by 2.6 acres. The state standard would set a goal of 222 acres of county open space for Watchung Borough. Using this calculation, Watchung Borough has a total deficit of 211.34 acres, since counties currently hold only 10.67 acres as open space

Executive Summary

While Watchung is a highly developed area, it still has natural resources and natural lands worth protecting and conserving. The Borough should use the presence of natural lands or habitats as a deciding factor in whether to go forward with potential open space acquisitions. Those resources identified in this plan (wetlands, flood plains, species habitat, waterways and steep slopes) are all critical for the health and well-being of Watchung residents and vital to the continued appreciation of natural areas.

Watchung is also rich in historical and cultural resources. To that end, the preservation of the Borough's places and structures of important historical significance must be a priority. There are several strategies that can be utilized to preserve these significant areas. First and foremost is the creation of an inventory of significant areas with acquisition priorities.

In setting the priority of creating and enhancing community connections for Watchung, the Plan defines community connections in two ways. First, community connections are the physical network links of opens space and recreation areas. Secondly, community connections are the non-physical aspects of community involvement including educational programming. Network links are the physical connections that can be created (for those that don't exist) or enhanced upon (for those that do exist) to create a functional system that links open space and recreation areas and resources. A comprehensive Open

Space and Recreation Plan also requires involvement on a community-based level by providing information, creating recreational and educational programs for residents to enjoy and partnering with local groups to respond to residents needs in term of open space.

Introduction



What is Open Space?

Open space, in the simplest of terms, is undeveloped land, but in reality it is often much more. Open space should be considered the landscapes and open areas that link together the built environment in which we live. Often it is the nature and extent of these connections, and the manner in which the population uses these areas that help define a community. There are many types of open space and everyone has their own perception of what open space means. Here are some usual examples of open space:

Forests, Fields, Meadows, Hedgerows, Lakes, Ponds, Rivers, Streams, Historic Sites, Yards, Gardens, Orchards, Vacant Lots, Athletic Fields, Scenic Views, Scenic Corridors, Historic Structures

Why do we need Open Space?

The benefits of open space are myriad and far reaching. Open space not only provides recreation opportunities and wildlife habitat, but it has an effect on human health and community well being. Open space creates areas for active and passive recreation, contributing to the physical and mental well being of those who utilize it. The benefits of open space break down into four main types.

- **Aesthetic Value** – Open space often protects “beautiful places” and differing landscapes such as forests, fields, waterways, gardens and scenic vistas offer aesthetic benefits to an area. Open space creates a pleasant and vibrant living environment. The restorative powers of natural scenery have been written about since the works of Thoreau. Residents and visitors alike form impressions about an area based on the natural spaces and green areas.
- **Ecological Function** – Lands in Open Space protection can help maintain the important balance in air and water quality. Open space can also help preserve vital storm water recharge lands and protect important environmental features. Floodplains, wetlands, and steep slopes can become hazards if developed, but if they are preserved in their natural state, they provide important ecological functions by maintaining their ability to absorb flood waters and retain pollutants, preserving air and water quality.
- **Recreation Opportunities** – People of all ages enjoy outdoor activities of all kinds. Whether pick up games or organized leagues, citizens need outdoor recreation fields and courts. These facilities also provide citizens meeting areas and comfortable spots to savor the relaxation they require.

Introduction

- Cultural Identity – Historic and cultural resources help define who we are and where we have come from. Preserving natural areas, farmlands, battlefields, historic structures and districts are important efforts for maintaining the quality of life for a community.

How many types of Open Space are there?

There are countless types of open space. Everyone has their own conception of what open space is and often times, many seemingly different types of open space occupy the same site. Open space generally falls into differing categories that play individual roles within a community. Here are some examples that illustrate the universe of possibilities.

Active Recreation

- Soccer Fields
- Football Fields
- Baseball & Softball Diamonds
- Running Tracks
- Swimming Pools
- Beaches
- Tennis Courts

- Basketball Courts
- Exercise Trails
- Skate Parks and Skating Rinks
- Performance Spaces
- Golf Courses & Driving Ranges

Passive Recreation

- Hiking Trails
- Bird Blinds
- Boardwalks
- Picnic Areas
- Quiet Places

Natural Resource Protection

- Forestlands
- Wetlands
- Wildlife Management Areas
- Floodplains
- Steep Slopes
- Groundwater Recharge Areas

What are Benefits of an Open Space Plan?

A good Open Space Plan requires a comprehensive planning approach, meaning that the process needs to look at opportunities and constraints in the area, rely on public input and produce innovative and custom solutions to meet determined public needs. Each community and region has its own particular open space opportunities and needs. The Open Space planning process that results in a competent plan creates certain advantages that include but are not limited to:

- Creates a proactive plan for open space protection – Municipalities can create a proactive plan for identifying needs and creating capital plans for acquiring and developing facilities instead of reacting to land use changes brought about by the private sector.
- Prevents reactive actions created by individual development proposals – When a jurisdiction has a plan in place, it will know how individual development proposals fit into the larger framework and can be prepared to implement changes in proposals to realize the vision of the plan.
- Provides opportunities for funding – Open Space plans that satisfy NJDEP Green Acres Program requirements meet one of the prerequisites for matching funds and acquisition grants.
- Creates community buy-in and support – A well crafted Open Space plan will

include public input and will provide a document that can be shared with community leaders and citizens to help build support for capital plans, open space acquisitions and recreation facilities improvements.

- Smart Growth Initiative – Open Space planning is an integral part of any Smart Growth Planning initiative. Open Space planning can be seen as planning the “Green Infrastructure”. Just as a community wants to plan its physical form and maintain its transportation, utility and communications infrastructure, it wants to do the same for its open space or “Green Infrastructure”.

Open Space Plan Vision & Intent



It is the year 2025 and the residents of Watchung Borough have a multitude of recreational opportunities available to them. The tree-lined properties, bordering gateway roads through Watchung, and well-preserved historical home sites, as reminders of Watchung's heritage, present vivid images of Watchung for residents and visitors. Ecologically-sensitive areas such as stream banks and steep slopes have been protected through property acquisition. Young people, adults and seniors all have their own favorite park within a quick walk from their home, or a favorite recreation facility within a short car or bus ride. No one feels their outdoor needs are unmet and vacant lots are now vest pocket parks that provide refuges of shade and greenery to calm the mind and lift the spirit. Well-defined and mapped trails varying in length, difficulty and scenery have been created through property and rights-of-way acquisition. These are popular among hikers, joggers, and scouting, environmental and nature groups for recreation. The interconnectivity of the trails and recreational areas allow children to explore Watchung's open space and recreational areas without being chauffeured by parents.

It is the intent of this plan to establish a well-organized program to identify, prioritize, enhance and preserve critical open space within the Borough. This plan will serve as the framework for moving forward with a proactive agenda for meeting all of the open space and recreational needs of Watchung Borough's citizens. The plan will address

the four major elements of open space – aesthetic value, ecological function, passive and active recreation, and cultural identity.

It is the intent of this plan to be crafted in a way as to take advantage of the benefits granted by a strong Open Space plan. This plan is a proactive plan for open space protection, thereby preventing purely reactive actions created by individual development proposals. This Open Space plan will meet the criteria of the NJDEP Green Acres Program for an Open Space and Recreation Plan. This compliant plan, coupled with the Open Space Preservation Trust Fund, will meet the requirements for matching funds and acquisition grants from the NJDEP Green Acres Program. This Open Space and Recreation Plan is complementary to and in agreement with existing plans for the region and will be another key element in the continuing application of Smart Growth principles guiding Watchung.

Open Space Plan Goals & Objectives



Goals

The goals of the Watchung Borough Open Space Plan:

- To improve the quality of life of Watchung Borough residents
- To provide accessible recreation opportunities to all Watchung Borough residents
- To provide green spaces for public enjoyment in Watchung Borough
- To actively acquire new Open Space lands where needed and feasible
- To protect areas of remaining critical resources, including:
 - Wetlands
 - Flood plains
 - Steep slopes
 - Wildlife Habitat
- To protect important view sheds throughout Watchung Borough
- To link proposed and existing recreation areas into an open space network
- To ensure protection of the Borough's historic and cultural resources
- To educate citizens about existing and future Open Space and Recreation opportunities, and continue efforts to increase support for these activities

Objectives

Quality of Life

- Ensure access to recreation facilities for all residents
- Ensure recreation facilities for all age groups
- Work toward goal of “ten minute walk to a park bench”
- Protect clean air and water through critical resource protection
- Identify new opportunities for small, local vest pocket parks throughout the Borough

Recreation

- Address needs identified for facilities deficits
- Provide for scenic walkways and bikeways
- Expand existing parks and encourage development of new parks where feasible
- Continue to react to public requests for new recreation facilities as needed

Green Spaces

- Identify vacant parcels as possible green spaces
- Identify existing publicly owned parcels as possible green spaces
- Assess needs for landscaping and tree maintenance in parks
- Provide incentives for private developments to include accessible green spaces
- Identify new opportunities for small, local vest pocket parks
- Coordinate with local, county, state and federal agencies to increase green spaces at public facilities

Open Space Plan Goals & Objectives

Acquisition

- Create a prioritized list of possible Borough acquisition priorities
- Utilize Open Space Trust Fund to further acquisition activities
- Partner with adjacent local municipalities, county, state agencies and private non-profit conservation groups for joint acquisition of Open Space to leverage available funding

Critical Resource Preservation

- Identify remaining critical resources
- Suggest critical resource protection ordinances
- Pursue acquisition of remaining critical resource areas
- Re-evaluate any Borough capital program in critical resource areas
- Pursue co-operative resource protection with adjacent municipalities, the county, the state, federal agencies and private non-profit conservation groups

Viewsheds

- Protect visual resources of the Borough along roadways and valley views in viewsheds

Network Links

- Provide for scenic walkways and bikeways
- Provide way-finding signage to nearby parks and recreation facilities
- Maximize access to cultural and historic facilities through public transportation and pedestrian walkway improvements

Cultural/Historic

- Preserve the integrity of the Boroughs historic districts and places and preserve structures of important historical significance
- Create a list of Borough historical resource acquisition priorities
- Utilize Open Space Trust Fund to begin acquisition activities of historic resources
- Encourage the adaptive reuse of historically significant structures
- Encourage the use of façade easements to preserve the appearance of historic buildings

Education/Involvement

- Produce pamphlet explaining key recommendations of this plan
- Put Watchung Borough Open Space and Recreation Plan on Borough's Website
- Create new educational signage for existing and proposed recreation areas

Public Participation

This open space plan is the product of a thorough public participation process. The plan was crafted with input from the Environmental Commission and the Open Space Advisory Committee. This plan is based on the previous work of both of these groups, in particular a draft open space plan prepared by the members of the Environmental Commission. This plan was drafted after consultation with each group and drafts were reviewed by each group for content and accuracy.

A draft of the plan was presented to the Planning Board for public comment and review. The draft plan was also distributed to various Borough departments, including the Recreation Department, the Historic Preservation Committee, the Borough Engineer, and the Borough Clerk for review. Finally the plan was presented to the Planning Board at a public hearing and was adopted as an amendment to the Borough Master Plan.

The New Jersey State Development and Redevelopment Plan

In 2001, the State adopted the State Development and Redevelopment Plan (SDRP). The Plan, including its State Plan Policy Map (Policy Map) was developed to guide municipal, county and regional planning, state planning and infrastructure investment decisions. The development of the Plan included an extensive public participation process called cross-acceptance.

The SDRP developed various statewide policies and organized them into nineteen categories. The policies were established to provide guidance for all levels of government in planning initiatives and are to be applied to all areas of the state. The following categories and individual policies should be considered when completing local open space planning:

- **Historic, Cultural and Scenic Resources:** Protect, enhance and where appropriate rehabilitate historic, cultural and scenic resources by identifying, evaluating and registering significant historic, cultural and scenic landscapes, districts, structures, buildings, objects and sites and ensuring that new growth and development is compatible with historic, cultural and scenic values.
- **Open Lands and Natural Systems:** Protect biological diversity through preservation and restoration of contiguous open spaces and connecting corridors; manage public land and provide incentives for private land

Relationship to Other Plans



Relationship to Other Plans

management to protect scenic qualities, forests and water resources; manage the character and nature of development for the protection of wildlife habitat, critical slope areas, water resources, and for the provision of adequate public access to a variety of recreational opportunities.

The SDRP also outlines specific policies that localities and regional entities should consider as they engage in any Open Space planning process, these include:

1. Integration of Goals: Plan and design the preservation of recreational and other open space land to maximize implementation of other statewide policies.
2. Open Space and Redevelopment: Provide in redevelopment programs, for the acquisition, development and maintenance of recreational and public open space that will assist in the creation of an attractive and desirable quality of life in the redevelopment area.
3. Trails, Greenways and Blueways as Public Open Space Linkages: Implement the NJ Trails Plan for a statewide network of open space (Greenways) and waterway corridors (Blueways) that link recreational and open space land.
4. Redevelopment of Brownfield Sites: Plan, locate and market redevelopment to capitalize on opportunities presented by Brownfield sites.

Relationship to Other Plans

The SDRP divides the State into planning areas that “reflect distinct geographic and economic units within the state and serves as an organizing framework for application of Statewide Policies and the State Plan.” The State Plan Policy Map places the vast majority of the Borough within the PA2 Suburban Planning Area while a small sliver along Route 22, comprised primarily of large-scale regional shopping facilities, is located within the PA1 Metropolitan Planning Area. These designations were unchanged from the previous version of the State Plan Policy Map and are reflective of existing and proposed conditions within the Borough. Certain small portions of the Borough, pertaining to large wetlands areas, are located within the PA5 Environmentally Sensitive Planning Area.

While the Borough did not object to the designation of PA1, PA2 and PA5 planning areas within the Borough, the Borough did question why the Weldon Quarry area was designated as a Critical Environmental Site (CES) since it was noted that the area is an active quarry and does not contain any of the characteristics of a CES. It noted that both State and County planning officials should be aware of the Borough’s multi-year planning study regarding potential future redevelopment of this area as an office/hotel/conference center. The area’s excellent access to Interstate 78, its proximity to similar large-scale office development across Valley Road within Berkeley Heights and indicated that the size of the site make it particularly suited for such development. The County’s Cross Acceptance Report to the State reflected this concern as well.

Relationship to Other Plans

The Somerset County Cross Acceptance Report of March 2005 includes the following important items:

Local Planning Priorities for Watchung Borough:

- Rural character of the residential areas
- High quality commercial development
- Character of the Village Center area

Regional Planning Priorities:

- Regional planning cooperation
- Regional traffic along/between Route 22 and 78
- Consistency with State and County planning programs
- Diamond Hill Rd/Route 78 interchange additions

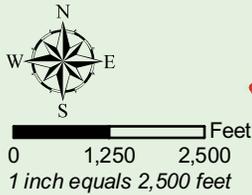
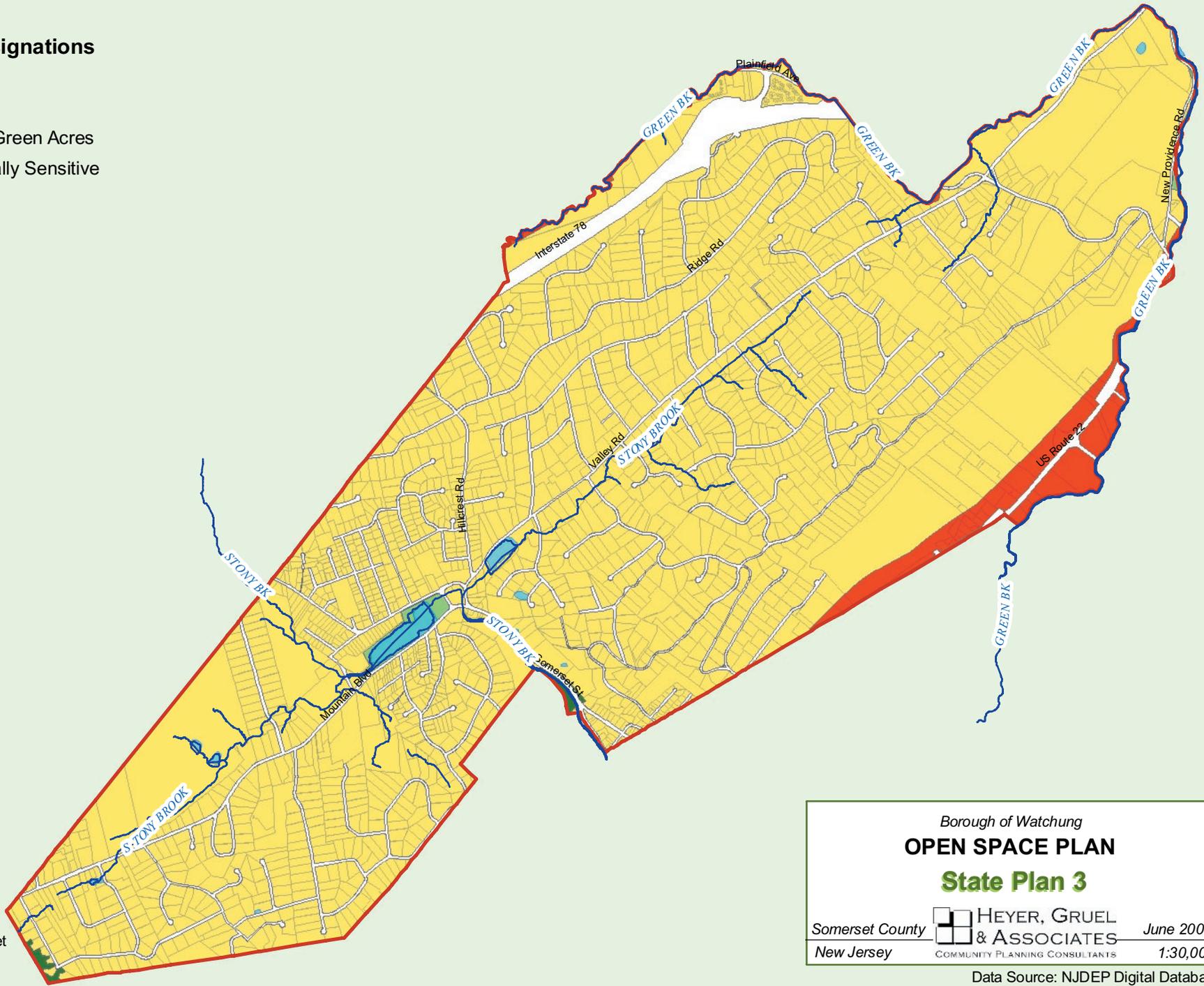
Other priorities listed by the Borough of Watchung are:

- Dredging of Best Lake and reconstruction of the dam
- Pedestrian access from Village Center to the triangle area including a walkway along the west side of Somerset Street, as well as a boulevard design along Somerset Street
- Extension of sewer into eastern section of Borough and modification of Village Center designation
- Development of design standards in the Village Center

Legend

State Plan 3 Designations

-  Metropolitan
-  Suburban
-  Local Park - Green Acres
-  Environmentally Sensitive



Borough of Watchung
OPEN SPACE PLAN
State Plan 3

Somerset County  HEYER, GRUEL & ASSOCIATES June 2006
New Jersey COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: NJDEP Digital Database

Relationship to Other Plans

New Jersey Statewide Comprehensive Outdoor Recreation Plan 2003-2007

The New Jersey Statewide Comprehensive Outdoor Recreation Plan (SCORP) is prepared every five years by the Department of Environmental Protection's Green Acres Program. The SCORP serves as a status report, strategic plan and guide for natural and recreational protection and planning. Relevant goals from the 2003 SCORP include:

- To preserve sufficient amounts of open space for current and future public use and to utilize the environmental protection amenities of open space to protect important natural resources for the enhancement of the quality of life in New Jersey
- To promote development of parks in New Jersey's urban and suburban centers to support revitalization efforts and to provide close to home recreation opportunities for residents statewide
- To encourage coordinated open space and recreation planning, acquisition and development initiatives of local governments and conservation organizations

Somerset County Parks, Recreation and Open Space Master Plan:

The 1994 Open Space Master Plan is the basis for most of the open space planning in the county, providing for a dedicated open space trust fund and an original open space goal of 10,500 acres. The current inventory of the County includes public parks and open space, private land currently in outdoor recreation use, and private lands permanently preserved for open space such as preserved agricultural lands.

Relationship to Other Plans

In December 2000, the County adopted an update to the Parks, Recreation and Open Space Plan. The key features of this update were:

- Create an open space system preserving lands of countywide significance
- Preserve open space to protect critical environmental resources
- Provide open space for a diverse mix of quality recreational experiences appropriate for a county park system
- Provide county parks where they will most easily serve the greatest population concentrations in Somerset County
- Increase the County parkland goal of 10,500 acres to 20,500 acres

The Somerset County Park Commission has proposed to achieve this goal by working with local non-profit organizations and municipalities to respond promptly to opportunities for open space purchases, land acquisitions or easement purchases involving: the expansion of existing county parks, greenways along county's major rivers and Second Watchung ridgeline, the Sourland Mountain, the Millstone River Valley, and new County parks in northern Somerset County. This will be achieved through the County's open space tax, municipal open space trust funds, public emphasis on growth management, and public-private partnership.

Relationship to Other Plans

Somerset County Open Space Partnership:

The County/Municipal Open Space Partnership Grant Program was established in 1995 with the following goals:

- To assist the municipalities of Somerset County in providing an adequate supply of lands and structures for public recreation and conservation;
- To retain land or water areas predominantly in their natural, scenic, open or wooded condition;
- Advance local preservation efforts by appropriating land for conservation of soil or wildlife; appropriating for outdoor recreation or park use; or appropriating as suitable habitat for fish or wildlife;
- And, ensure that lands and structures acquired will remain in use for recreation or conservation purposes in perpetuity.

Since the program's inception through March 2005, more than \$9.2 million dollars have been awarded through the Partnership to help preserve over 1,800 acres of open space. The grant program is only open to municipal governments in Somerset County. County Planning Board staff administers the program, which operates as a competitive grant process on an annual basis. The County Planning Board, Park Commission and Open Space Advisory Committee review applications based on a number of criteria including an emphasis on decreased opportunity and increased need in more urbanized

Relationship to Other Plans

municipalities, and recommend awards to the Board of Chosen Freeholders. Projects so far include North Branch Raritan River Greenway in Bedminster, Passaic River Greenway in Warren, expansion of the Sourland Mountain Preserve in Hillsborough and Montgomery, etc.

Lands for recreation and conservation purposes located within Somerset County are eligible for acquisition with Partnership Grant funding. Lands may include:

- River waterfront, lake, pond or stream that provides the opportunity for physical and visual public access, swimming, water sports, fishing and/or boating;
- A natural area such as a wildlife preserve, forest and/or wetland, scenic vista or landscape that provides opportunity for conservation, nature observation, camping and/or hiking;
- Grants to expand local open space holding - pocket parks, playgrounds, athletic fields, and active or passive recreation areas.
- Assistance in funding County designated Primary Greenways or local greenways.
- Preserving open space properties under imminent development pressure.

(Refer to County/Municipal Open Space Partnership of Somerset County – Policy and Procedures Manual, Revised February 2003 and Final Somerset County Cross-Acceptance Report, March 2005 for more details)

Relationship to Other Plans

Watchung Master Plan

The 2005 Master Plan Reexamination report specifically addressed Open Space and Recreation Planning.

Open Space and Recreation Planning. The 1999 Reexamination Report indicated a need for new, improved and expanded recreational facilities, specifically with respect to ball fields and tennis courts, as well as walking paths and trails. The 1999 Reexamination Report also recommended that the Borough conduct an inventory of open space in order to facilitate the planning of recreation facilities, walking paths and trails and other Borough community facilities in the future. It recommended that the Master Plan reflect “general criteria for open space acquisition and any important parcels that should be acquired by the Borough.”

An Open Space Plan was subsequently prepared, dated May 2000, which identified potential opportunities for open space preservation and which contained acquisition criteria as recommended in the 1999 Reexamination Report.

The Borough is currently in the beginning stages of preparing a new Open Space and Recreation Plan. Like the housing plan, the new Open Space and Recreation Plan is being done on a “parallel track” with the Master Plan Reexamination and

Relationship to Other Plans

is being prepared in coordination with the Master Plan Reexamination to ensure consistency. The new Open Space and Recreation Plan will serve to update and expand upon the May 2000 Open Space Plan. It will meet the requirements for Green Acre funding and will be incorporated as an element of the Borough Master Plan.

The new Open Space and Recreation Plan should serve to implement the open space preservation related goals of the 1994 Master Plan Update. The plan should evaluate and refine, if necessary, the acquisition criteria set forth in the 2000 Open Space Plan. Finally, the new Open Space and Recreation Plan should consider the open space and recreation related issues/proposals that have been identified during this Master Plan reexamination process, which include:

Relationship to Other Plans

- Adding additional baseball and softball fields;
- Providing a new all purpose field for lacrosse, field hockey and soccer;
- Building of an all-purpose recreation center;
- Creating a bandstand for community concerts and plays;
- Replacing the pavilion at Mobus Field;
- Creating a skate park;
- Developing Camp Endeavor;
- Using the Ness Property for open space and/or recreation facilities in combination with other municipal needs;
- Creating pedestrian and bike paths in a number of locations including Old Somerset Trail around Phillips Field, along Somerset Street to provide a pedestrian link between the Circle and triangle areas, to provide links to nearby parks such as Watchung Reservation;
- Providing more parking for Mobus Field;

Designated Resources

Watchung Borough currently has an array of parks and open space areas that will create the basic building blocks of an enhanced open space, recreation and greenway infrastructure. This enhanced green infrastructure will provide an intricate system of recreation opportunities that will sustain the Borough's position as a desirable place to live and work well into the future.

Parks and open space areas protect the quality and quantity of surface and ground water resources. Open Space can guide the development and growth of our built environment. Sensitive protection plans work to preserve natural and historic resources at the same time. All of these efforts shape and maintain community character and provide a myriad of active and passive recreation opportunities for residents.

There are a total of 109.88 acres of publicly-owned open space in Watchung Borough. Of these, the Borough of Watchung owns 67.13 acres and 6.82 acres are owned by Somerset County. There are 1.63 acres of Open Space in State ownership through the DOT and 3.83 acres under Union County Park Commission ownership in the County. There are also 30.47 acres of recreational open space owned by the Watchung Board of Education. Privately-owned recreational areas contribute 121.57 acres of open

Existing Open Space Resources



Existing Open Space Resources

space. This private open space increases the available open space in the Borough of Watchung to 231.45 acres. Other open spaces in the Borough include schools (that contain recreational facilities), religious institutions, and utility rights-of-way.

The inventory of publicly and privately owned open space as well as other open spaces and vacant lands in the Borough of Watchung is shown in the table below. The percentages are based on the area of Borough of Watchung as being 3,850 acres.

Open Space Type	Lots	Acres	Percent of total area
Public Open Space	33	109.88	2.85
Ness Farm	1	19.81	0.51
Public Facilities and Right-of-Way parcels	23	39.05	1.01
Private Recreation and Open Space	15	121.57	3.16
Public Schools	5	19.74	0.51
Private Schools	2	71.98	1.87
Church and Charitable Properties	13	46.08	1.20
Quarry	27	197.13	5.12
Private Vacant Properties	77	136.12	3.54
Utilities Rights-of-Way	12	32.22	0.84
TOTAL	208	793.58	20.61

Existing Open Space Resources

Watchung Public Parks and Recreation Areas

Borough of Watchung

Name	Block	Lot	Location	Area (acres)
"Camp Endeavor"	69.08	22	Sequoia Drive	9.19
Anderson Road Open Space	8.02	1.01, 1.02, 1.03	60 Anderson Road	10.33
Best Lake and Park	44.01	8, 8.01, 9	Valley Road	8.93
Johnston Drive Open Space	52.01	3.02	Johnston Drive	0.13
Mobus Field	24.01	4.01, 4.02	Brookdale Road	3.60
Open Space	70.12	2	Plainfield Avenue	1.16
Veterans Memorial Park	47.01	1	770 Somerset Street	0.10
Watchung Lake	24.01	1.01, 4.01, 4.02	Mountain Blvd.	19.62
Old Somerset Road/Phillips Lane	70.07	1	Phillip Lane	1.62
Spratford Park	16.04	17.01, 18, 19	Somerset Street	0.59
Stony Brook	16.04	20.02, 20.03	Somerset Street	10.19
Open Space/Vacant Land	70.08	30	95 Drift Rd	1.5
Village Green	16.04	15.03	Somerset Street	0.17
Total				67.13

Watchung Board of Education

Name	Block	Lot	Location	Area (acres)
Phillips Field	3.02	1	Brookdale Road	30.47

Existing Open Space Resources

County Open Space

Somerset County

Name	Block	Lot	Location	Area (acres)
Open Space along Stony Brook	46.02	1, 2		3.33
Stony Brook	16.04	21	Somerset Street	1.12
Watchung Reservation (as per Green Acres)	7801	5, 7, 8	Route 22	2.37
Total				6.82

Union County

Name	Block	Lot	Location	Area (acres)
County Park	7801	9	New Providence Road	1.21
County Park/ Watchung Reservation	7701	3	New Providence Road	2.62
Total				3.83

State of New Jersey DOT

Name	Block	Lot	Location	Area (acres)
Stony Brook	16.04	17.02	Somerset Street	1.63

Recreation and Open Space Inventory (ROSI)

The Recreation and Open Space Inventory (ROSI) is a document required by the Green Acres Program for any jurisdiction that has received Green Acres Grant money for Open Space acquisition. The lands purchased with these funds and all lands held in public ownership at the time of the initial grant that are held for recreation or conservation purposes are required to be listed. These lands are to be held as restricted and not dispersed. Removal of lands listed on previous ROSIs is prohibited without consent of Green Acres. Lands held by public agencies such as school boards, parking authorities, and housing authorities should not be inventoried unless those lands are held for recreation or conservation purposes. Communities wishing to take advantage of the Green Acres Planning Incentive funding program need to complete an Open Space and Recreation Plan (OSRP). This "Open Space and Recreation Plan" serves as Watchung Borough's vision for open space and recreation. Participation in the Green Acres Planning Incentive funding program qualifies the county for 50% matching grants to preserve lands identified in its OSRP, since the county has already created the Open Space Trust Fund. According to the NJDEP/Green Acres Program (November 15, 2005), Somerset County Open Space Tax program collected 3 cents per \$100 of property value, totaling \$15,000,000 in 2005. The Borough of Watchung has a part of the Watchung Lake (Block24.01, Lot 1.01) funded through the Green Acres funding.

Existing Open Space Resources

Private Open Space

The Twin Brooks Country Club is the largest privately owned open space in the Borough of Watchung.

Private Open Space				
Name	Block	Lots	Location	Area (acres)
Twin Brooks Country Club	3.01	22, 23, 24, 28, 28.01, 28.02, 28.03, 28.05, 28.06, 28.07, 28.08, 28.09	Mountain Boulevard	108.38
Brook Hill Swim and Tennis Club	70.10	5.01, 5.02, 5.03	Drift Road	13.2
			Total	121.58

Schools:

This category includes public and private school playgrounds, which contain recreation facilities, located on a total of 91.72 acres of land in the Borough. The Valley View School is located on about 5.63 acres of property (Block 31.01 Lot 6) owned by the Board of Education, Borough of Watchung. Bayberry School is also a public school, owned by the Watchung Board of Education, located on four parcels totaling 14.11 acres. Mt. St. Mary's Academy is a private school, owned by the Sisters of Mercy, located on 72 acres of property on US Route 22.

Existing Open Space Resources

Public Schools: Watchung Board of Education

Name	Block	Lots	Location	Area(acres)
Bayberry School	69.09	6,7,8,9	Bayberry Lane	14.11
Valley View School	31.01	6	Valley View Road	5.63
Total				19.74

Private School: Sisters of Mercy

Name	Block	Lots	Location	Area(acres)
Mt. St. Mary's Academy	64.02	4,5	Route 22	71.98

Churches and Charitable Property:

Churches and charitable property contribute a total of 46 acres to the total land use, and include St. Mary's Stony Hill R.C. Church, Mary E. Wilson Memorial Union Church, St. Mary's Cemetery and the Watchung Ridge Assisted Living community.

Name	Block	Lots	Location	Area(acres)
St. Mary's Stony Hill R.C. Church	12.01	7,8	225 Mountain Blvd	24.62
Mary E. Wilson Memorial Union Church	43.01	1,2,3,37,38	7 Valley Road	6.30
St. Mary's Cemetery	70.01	8.01-8.05	Interstate 78	8.08
Watchung Ridge Assisted Living	301	30	676-680 Mountain Blvd	7.0
Total				46.0

Existing Open Space Resources

Recreation Facilities:

Name of Open Space	Location	Activities
Mobus Field	Brookdale Road	Tennis, Basketball, Baseball & Softball, Ice Skating
Phillips Field	Corner of Brookdale Road	Baseball, Softball & Soccer, Field Hockey, Lacrosse
Camp Endeavor	Top of Bayberry Lane to Sequoia Drive	Tennis
Watchung Lake Park	Watchung Circle	Sledding, Fishing & Walking
Best Lake Picnic Grove	Off of Watchung Circle on Valley Road	Fitness circuit and the "soon to be "chess and checker game table area.

Watchung Lake and Best Lake are the two major water bodies that are linked to open space through the Watchung Lake Park and Best Lake Park. The zoning code of Watchung Borough prohibits ice-skating, swimming and water sports, and remote control model motorboats on either Best Lake or Watchung Lake at any time. Fishing is prohibited along and on all areas of Watchung Lake, except along the retaining wall on the side of the lake adjacent to Stirling Road. No skateboarding, roller-skating, bicycling, and pedestrian traffic is permitted on the concrete portion of the Watchung Lake Dam or Spillway or on any walkway within the Watchung Lake Park.

Existing Open Space Resources

Quarry:

The Weldon Quarry site, owned by Brunswick Hot Mix Corporation, is located between Bonnie Burn Road, New Providence Road, Valley Road Extension, and Johnston Drive.

The property consists of 27 lots totaling 197.13 acres.

Adjacent Open Space Facilities:

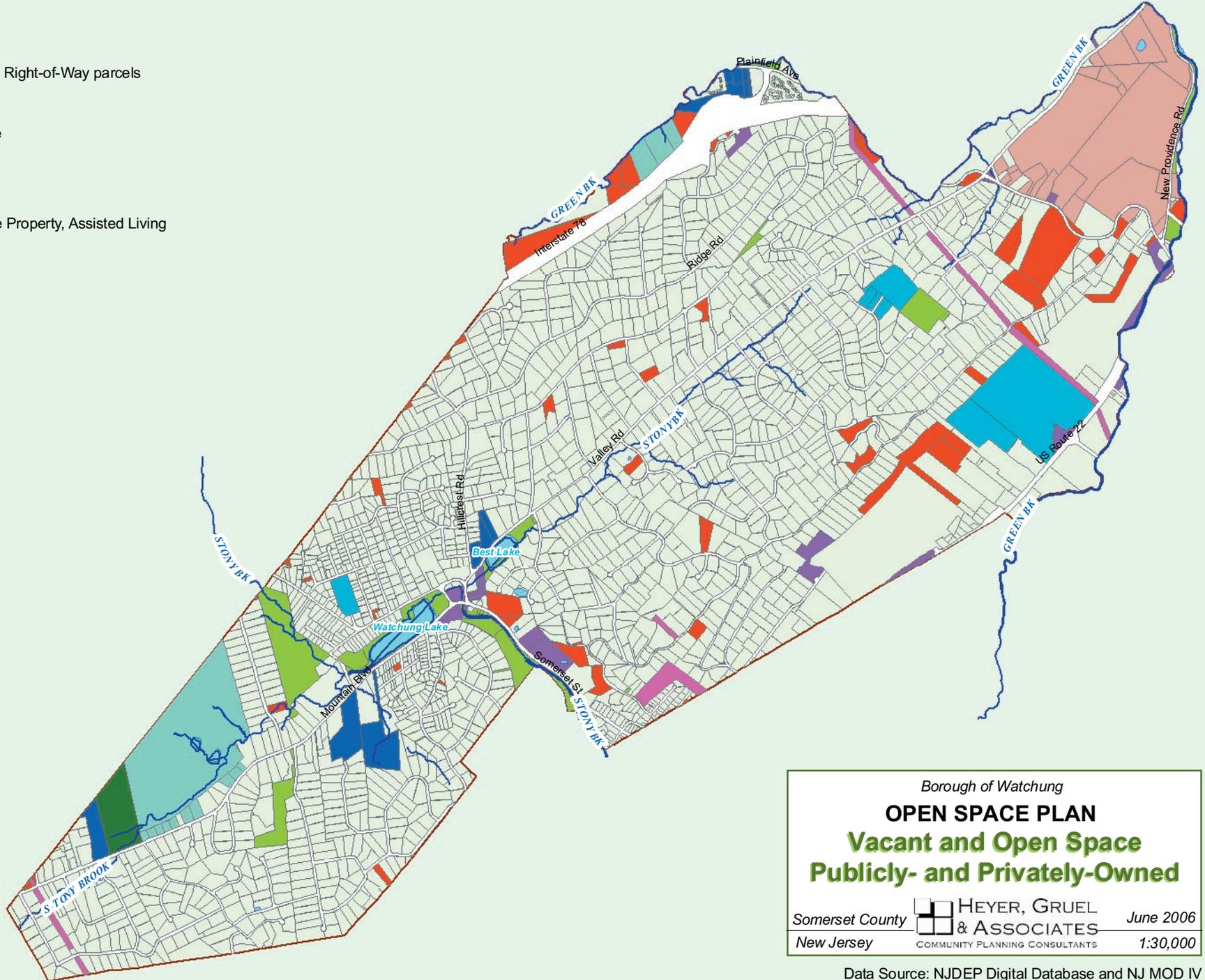
The Watchung Reservation is a 2060 acre preserve in Union County (municipalities of Summit, Scotch Plains, Springfield, Mountainside and Berkeley Heights), located north-east of Watchung Borough. Part of the reserve also lies within the Borough of Watchung.

The preserved natural area contains forests, three ponds, swamps, streams, springs, fields and over thirteen miles of color-coded hiking trails. Advisable areas for ice skating on natural waterways in Watchung Reservation include Lower Lake Surprise and Seeley's Pond.

The Washington Rock State Park lies to the south of Watchung Borough in Green Brook Township.

Legend

- Public Open Space
- Public Facilities and Right-of-Way parcels
- Ness Farm
- Private Open Space
- Vacant Parcels
- Schools
- Church & Charitable Property, Assisted Living
- Quarry
- Utilities



0 1,250 2,500 Feet
1 inch equals 2,500 feet

Borough of Watchung
OPEN SPACE PLAN
Vacant and Open Space
Publicly- and Privately-Owned

Somerset County  HEYER, GRUEL & ASSOCIATES June 2006
New Jersey COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: NJDEP Digital Database and NJ MOD IV

Natural Resources

Watershed Management Areas

A watershed is an area that drains into a common waterway, such as a stream, lake, estuary, wetland, or, ultimately, the ocean. The watershed includes both the waterway itself and the entire land area that drains into it. Geographical features such as hills and slopes separate distinct watershed systems. Watershed Management Areas (WMAs) are the regulatory units of NJDEP's Division of Watershed Management for categorizing, managing and protecting watersheds throughout the State. The Borough of Watchung lies in the Lower Raritan, South River, and Lawrence Brook Management Area (WMA 9).

The Lower Raritan River Drainage WMA includes watersheds draining into the lower portion of the Raritan River, South River, and Lawrence Brook. This WMA lies mostly in Middlesex, Somerset and Monmouth Counties, and includes the Mainstem Raritan River, South River, Lawrence Brook, Manalapan River, and Matchaponix Brook watersheds.

The Raritan River basin is the largest river basin located entirely within New Jersey. Major waterways within the Raritan Basin include the North and South Branches of the Raritan River, the Millstone River, the Stony Brook, the main Raritan River, Bound Brook, Green Brook, the South River, Lawrence Brook and all of their tributary streams. Lying mostly in Middlesex and Somerset and Monmouth counties, the land use in this watershed is primarily urban/suburban, with industrial and commercial centers throughout.

Environmental Resource Inventory



Environmental Resource Inventory

The Mainstem Raritan River begins at the confluence of the North and South Branches to the Raritan Bay north of Sandy Hook. The Mainstem Raritan River is 31 miles long and drains parts of Somerset, Union, Middlesex and Monmouth Counties before emptying into the Raritan Bay. It is a densely populated drainage area, consisting of primarily urban and suburban land uses, with some industrial and commercial centers. There are two low dams in this river, Fieldsville Dam and Calco Dam. There are many small, recreational lakes and ponds in the area. The watershed has more than 70 NJPDES permitted dischargers and 29 biological monitoring stations.

The Raritan River is impacted by non-point source pollution from urban and suburban development. Additional non-point source pollution from landfills affects the lower portions of the river. Runoff from urban surfaces, storm sewers and roadways is an increasing problem in the watershed. Additional contamination sources are suspected from the land disposal of wastewater and from local chemical spills.

Watershed areas with greater than 50% conversions of their riparian areas to non-natural land cover types appear in developed or developing areas of the Lower Raritan, South River, and Lawrence Brook Management Area along Green Brook and Bound Brook.

Legend

WaterShed Management Area

 Lower Raritan, South River, and Lawrence

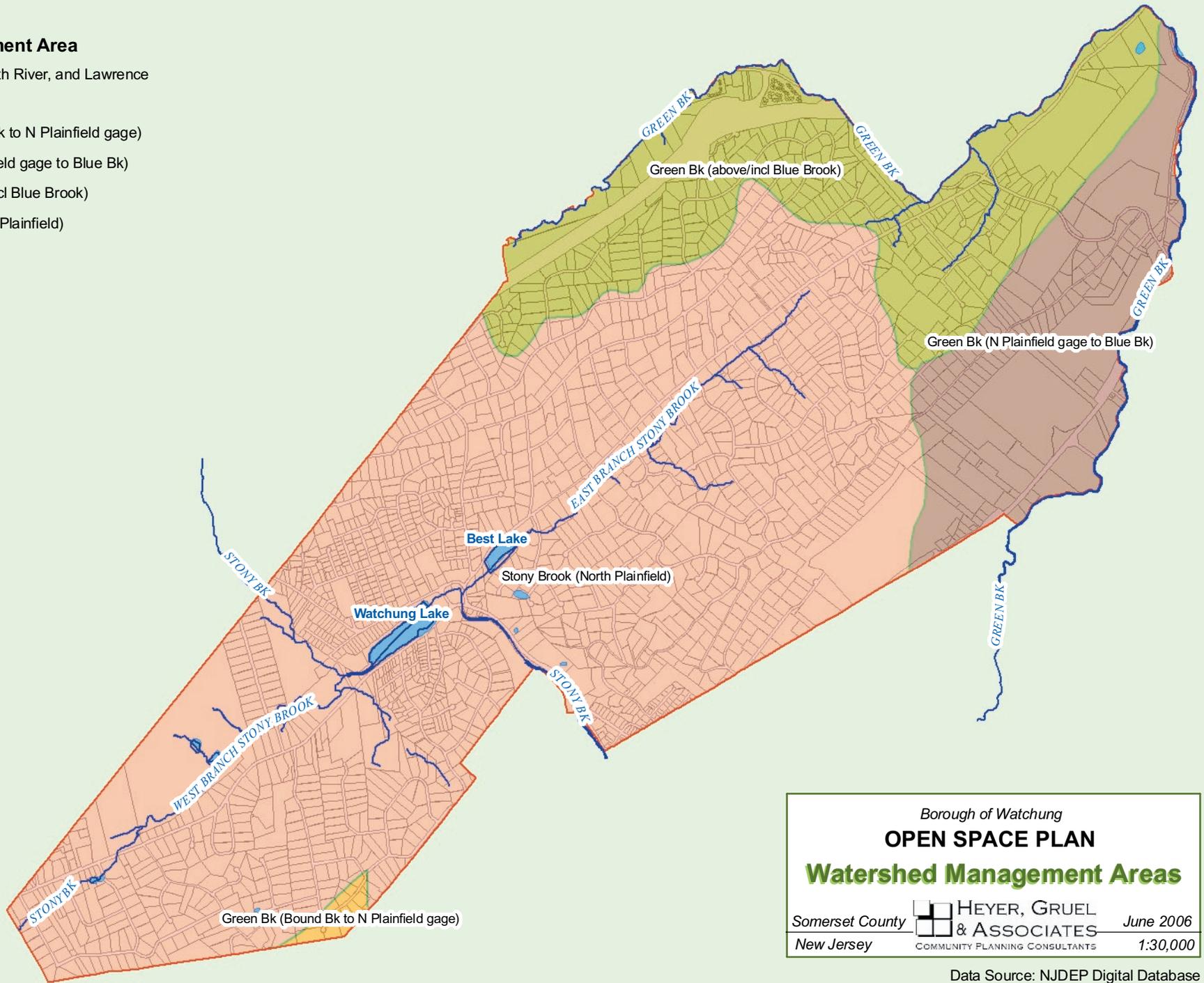
Sub-WaterSheds

 Green Bk (Bound Bk to N Plainfield gage)

 Green Bk (N Plainfield gage to Blue Bk)

 Green Bk (above/incl Blue Brook)

 Stony Brook (North Plainfield)



Borough of Watchung

OPEN SPACE PLAN

Watershed Management Areas

Somerset County  HEYER, GRUEL
New Jersey  & ASSOCIATES June 2006
COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: NJDEP Digital Database

Surface Hydrology

The two major streams in Watchung Borough are Green Brook and Stony Brook. Green Brook, a tributary of the Raritan River, starts in the Watchung Mountains west of Springfield and flows southwestward and parallel to that ridge to join the Raritan River at Bound Brook.

Lakes and ponds in the area include Watchung Lake, Best Lake, Surprise Lake, Spring Lake and Green Brook pond. The four sub-watersheds in Watchung are Stony Brook (North Plainfield), Green Brook (Bound Brook to N Plainfield gauge), Green Brook (N Plainfield gauge to Blue Brook) and Green Brook (above/including Blue Brook).

Water Quality

Green Brook and Stony Brook are the two major streams and Best Lake and Watchung Lake are the two open water bodies in the Borough of Watchung. Green Brook is a FW2-TM classified stream. In Watchung, the 1999 AMNET results compared the Green Brook, which was assessed as severely impaired in 1996 but improved to moderately impaired in 1999. Sections of the Green Brook around Watchung Borough, Apple Tree Lane as well as around Raymond Avenue are severely impaired. Stony Brook is a FW2-NT classified stream and runs through the center of the Borough. Both Best Lake and Watchung Lake are located in the course of this stream.

Information from the New Jersey Pollutant Discharge Elimination System (NJPDDES) indicates that two surface water discharge locations exist in the Borough of Watchung. The Sears Facility 1294 pipe used for petroleum production cleanup and industrial discharge to the Green Brook via storm sewer was revoked/terminated at the end of November 2003.

1. Colorado Café WTP: This is a publicly owned sewage treatment plant discharge pipe, which discharges less than 1 MGD, existing in the point source permitting regions that drains sanitary discharge into the Green Brook.
2. Fanwood Crushed Stone: Discharges storm water and minor (based on the amount of pollutant(s) in the effluent) industrial effluents to the Green Brook via storm sewer. This discharge location has been transferred to Bureau of Non-point Pollution Control (BNPC).

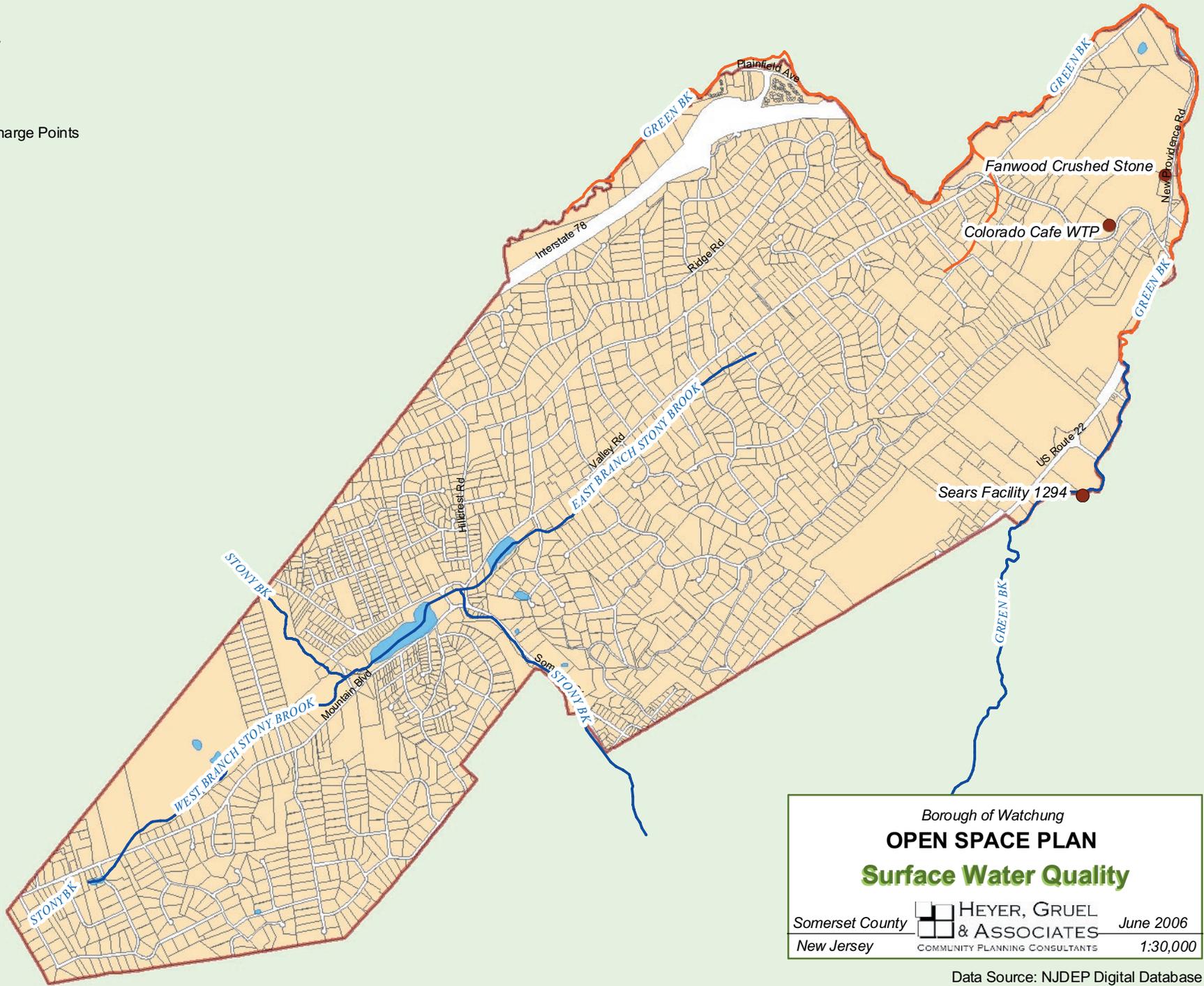
Legend

Surface Water Quality

- FW2-NT
- FW2-TM
- Surface Water Discharge Points



0 1,250 2,500 Feet
1 inch equals 2,500 feet



Borough of Watchung
OPEN SPACE PLAN
Surface Water Quality

Somerset County  HEYER, GRUEL & ASSOCIATES June 2006
New Jersey COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: NJDEP Digital Database

Soils

Knowledge of soil types, characteristics, and their geographic distribution can inform the planning and policy processes and influence the smart growth and development of a community. Data on soil depth, permeability, water table, and other physical properties are useful when determining the suitability of soils for foundation construction, location of septic fields, landscaping, and construction of roads, athletic fields and parks. The soil data in this report is provided by the National Resources Conservation Service of the United States Department of Agriculture, which started conducting national soil samples in 1999 and continues today.

Watchung Borough has 27 different soils, divided into 16 major types. The largest association, found in several large areas in Watchung, is of Neshaminy-Mount Lucas-Amwell soils formed mainly in glacial till or material weathered from granitic gneiss, diabase, or basalt. This makes the landscape of rolling or hilly uplands with loamy, gravelly and very stony soils. Steep slopes, stoniness, and a high seasonal water table are limitations for community development.

The most prevalent soils are the Neshaminy-Mount Lucas complex located throughout the central area of the Borough, accounting for about 40% of the total land. These are deep, moderately well-drained and somewhat poorly drained soils that are located on

Environmental Resource Inventory

hillsides and ridges and on the lower slopes in the Watchung and Sourland Mountains. Ranging from 2% to 18% percent, the soils are composed of 50-70% Neshaminy soils and 30-50% Mount Lucas soils with a high content of stones and boulders.

Mount Lucas-Watchung complex is the second most common soil type in the Borough, consisting of almost a fifth (about 19%) of the total land. These soils are about 65% Mount Lucas soils and 35% Watchung soils with stones, gravel and cobbles. Slopes range from 2% to 12%. The soils are on undulating uplands, on hillsides and at the base of steeper slopes in the Watchung and Sourland Mountains.

The third major soil type is the Amwell series (about 16% of the total land) that consists of deep, moderately well-drained and somewhat poorly drained soils with a firm fragipan (that limits effective rooting depth for vegetation) in the lower part of the subsoil. Mainly found on hillsides and lower slopes and at the base of the Watchung Mountains, these naturally fertile soils occupy intermediate positions of the landscape. Slopes range from 2% to 12%.

The remaining 13 types make up a quarter of the total land area. Their breakdown, in acres and percent of total land, is shown in the following table.

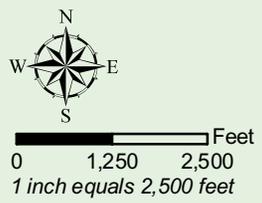
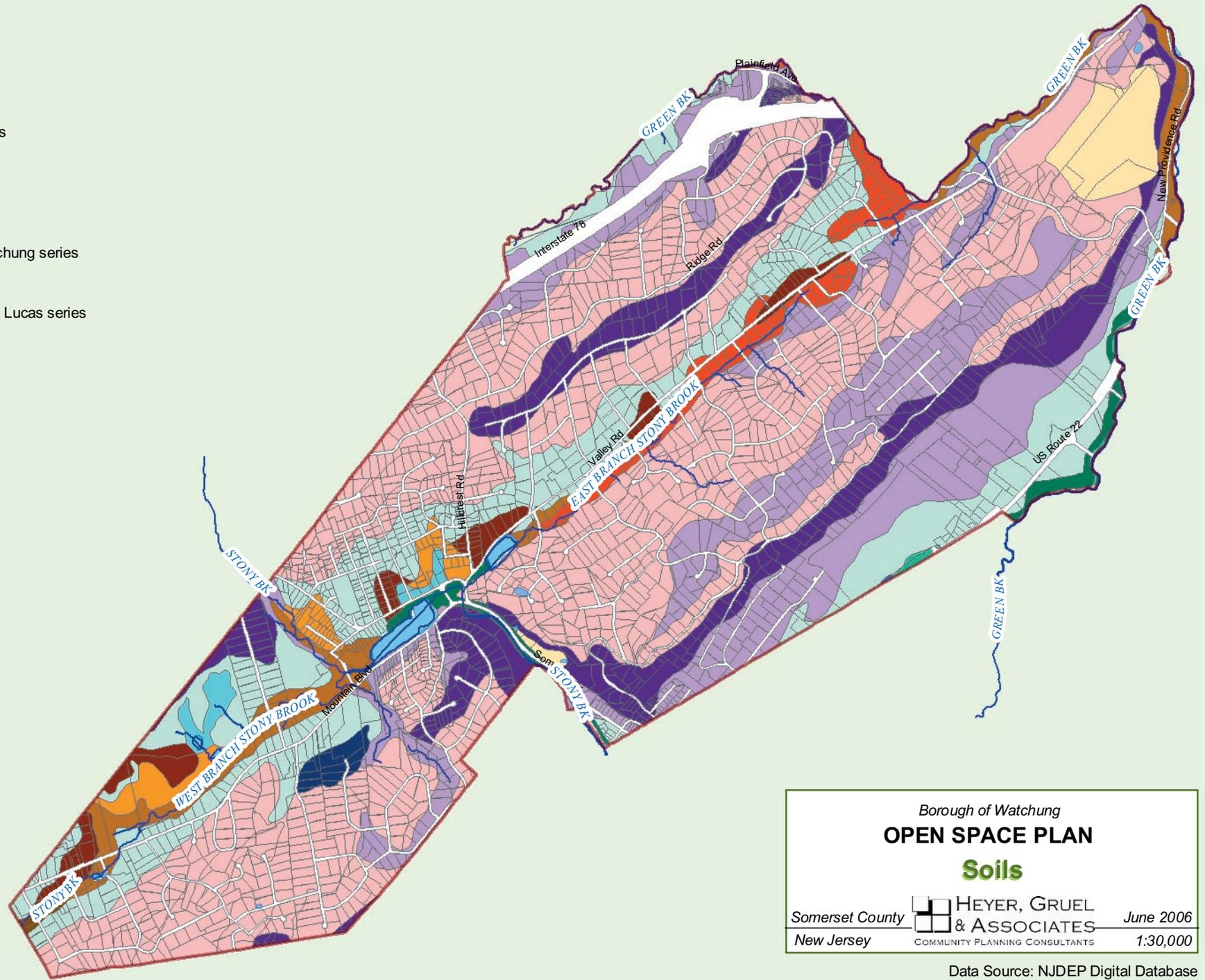
Environmental Resource Inventory

Name	Area In Acre	Percentage
Neshaminy-Mount Lucas	1557.32	40.76
Mount Lucas-Watchung	727.36	19.04
Amwell series	595.91	15.60
Neshaminy series	388.70	10.17
Rowland series	136.64	3.58
Parsippany series	91.28	2.39
Quarry	85.80	2.25
Penn series	78.71	2.06
Reaville series	53.34	1.40
Bowmansville series	46.09	1.21
Croton series	24.01	0.63
Mount Lucas series	19.28	0.50
Birdsboro series	7.92	0.21
Whippany series	5.51	0.14
Dunellen series	1.83	0.05
Parsippany-Urban land complex	0.85	0.02
Totals	3820.55	100.00

Legend

Soils

-  Amwell series
-  Birdsboro series
-  Bowmansville series
-  Croton series
-  Dunellen series
-  Mount Lucas series
-  Mount Lucas - Watchung series
-  Neshaminy series
-  Neshaminy - Mount Lucas series
-  Parsippany series
-  Penn series
-  Quarry
-  Reaville series
-  Rowland series
-  Whippany series



Borough of Watchung
OPEN SPACE PLAN
Soils

Somerset County New Jersey	 HEYER, GRUEL & ASSOCIATES <small>COMMUNITY PLANNING CONSULTANTS</small>	June 2006 1:30,000
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Data Source: NJDEP Digital Database

Geology

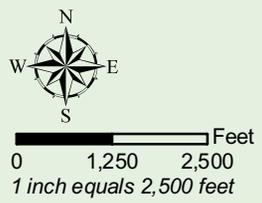
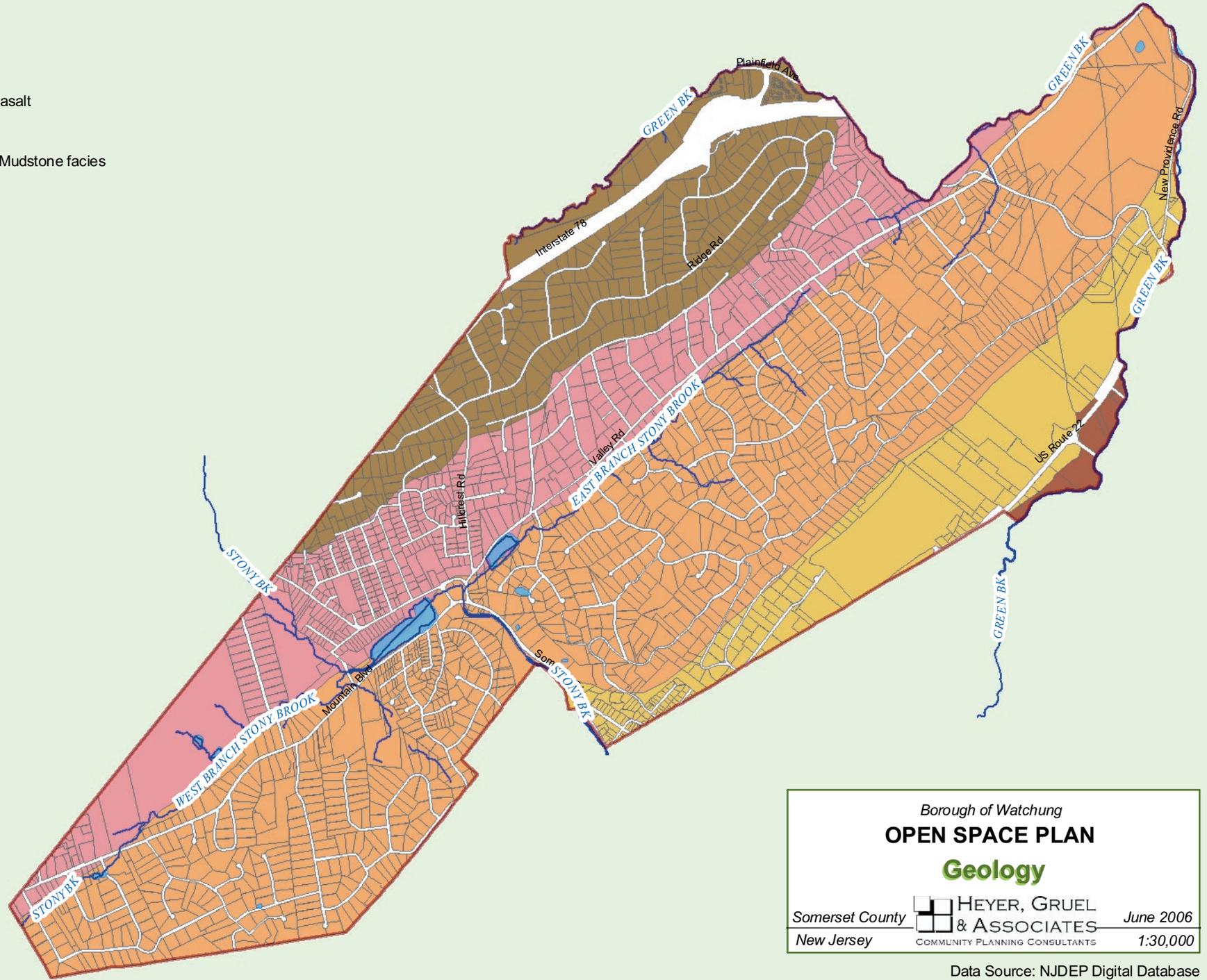
Watchung is characterized by five types of geological formations:

1. Orange Mountain Basalt – The lithology of this formation consists of fine- to medium-grained basalt that covers 51.1% of the total land area.
2. Feltville Formation – This formation consists of sandstone, siltstone, silty mudstone, fine- to coarse-grained, and less abundant calcareous siltstone and mudstone, carbonaceous limestone, covering 20.88% of total land area.
3. Preakness Basalt – Covering 15.53% of total land area, this formation consists of two types of formations - sandstone and siltstone (0.2% of total land area), and basalt, fine- to coarse-grained (15.3% of the total land area)
4. Passaic Formation – Consists of siltstone and shale, covering about 11.63% of total land.
5. Passaic Formation Mudstone Facies – Consists of sandy mudstone covering 0.85% of total land area.

Legend

Geology

- Feltville Formation
- Orange Mountain Basalt
- Passaic Formation
- Passaic Formation Mudstone facies
- Preakness Basalt



Borough of Watchung
OPEN SPACE PLAN
Geology

Somerset County New Jersey	 HEYER, GRUEL & ASSOCIATES <small>COMMUNITY PLANNING CONSULTANTS</small>	June 2006 1:30,000
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Data Source: NJDEP Digital Database

Steep Slopes

Disturbance to steep slopes can affect plant life and drainage patterns, increase the amount and speed of runoff and can cause erosion, soil creep, slumping (sections of soil shifting down and outward on the slope), and landslides.

Runoff carries eroded sediments to lowland areas, wetlands, ponds, lakes and streams, where the resulting turbidity and siltation can damage or destroy aquatic life and disrupt the ability of wetlands to filter and purify water. This combination of increased runoff and siltation affects the ability of streams and wetlands to retain water, changing the pattern and rate of the water's rise and fall and causing increased flooding. Turbidity and siltation also contribute to the eutrophication process in lakes, speeding the natural aging process.

Dramatic runoff problems often result when slopes are covered with impervious surfaces, such as buildings, roads, driveways and parking lots. Since water can't percolate into the soil, it runs off the site, picking up speed as it travels across these surfaces. Eroding surrounding soils, this high velocity runoff carries increased amounts of silt into nearby surface waters.

Environmental Resource Inventory

In addition to the obvious problems of runoff, erosion and landslides, altering the soils or vegetation on slopes may also reduce the percolation of water into the soil and disrupt the recharge of groundwater and aquifers. Aquifers in areas of steep bedrock, as in parts of northern New Jersey, do not contain much water. Poorly designed or excessive development that disrupts aquifer recharge while increasing the demand for water for human consumption can result in periodic or permanent water shortages. The heavy road salting typical in hilly areas and from septic installation on slopes, where soils are thin or otherwise unsuitable for leach fields can damage aquifers. In such areas, septic effluent may seep out on the face of the hillside.

Steep slopes are those areas with land topology gradient greater than 15 percent. These areas have limited capacity for community development, often accompanied by adverse environmental impacts, due to high construction costs. In the Borough of Watchung, areas with such steep slopes are found along Ridge Road extending from Plainfield Avenue in the north to Phillips Field in the south, along Somerset Street and Stony Brook, and along the south of Johnston Drive. These areas also have slopes in excess of 25 percent in some parts. Mostly, the topography of Watchung is undulating with slopes ranging from 0 to 10 percent in the remaining parts of the Borough. Areas around Interstate 78, Valley Road, Bonnie Burn Road, Mountain Boulevard, Twin Brooks Country Club, and US Route 22 are relatively flat with 0 to 5 percent slopes.

The elevations in Watchung are between 160 feet above sea level, along Somerset Street and Stony Brook, and 560 feet above sea level, just north of Ridge Road. The Ridge Road and Johnston Drive corridors are located along the highest contours and Interstate 78, Valley Road/Mountain Boulevard, and US Route 22 are located at the lowest contours in the Borough.

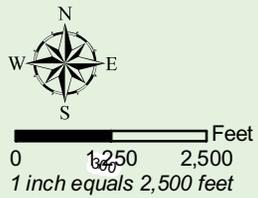
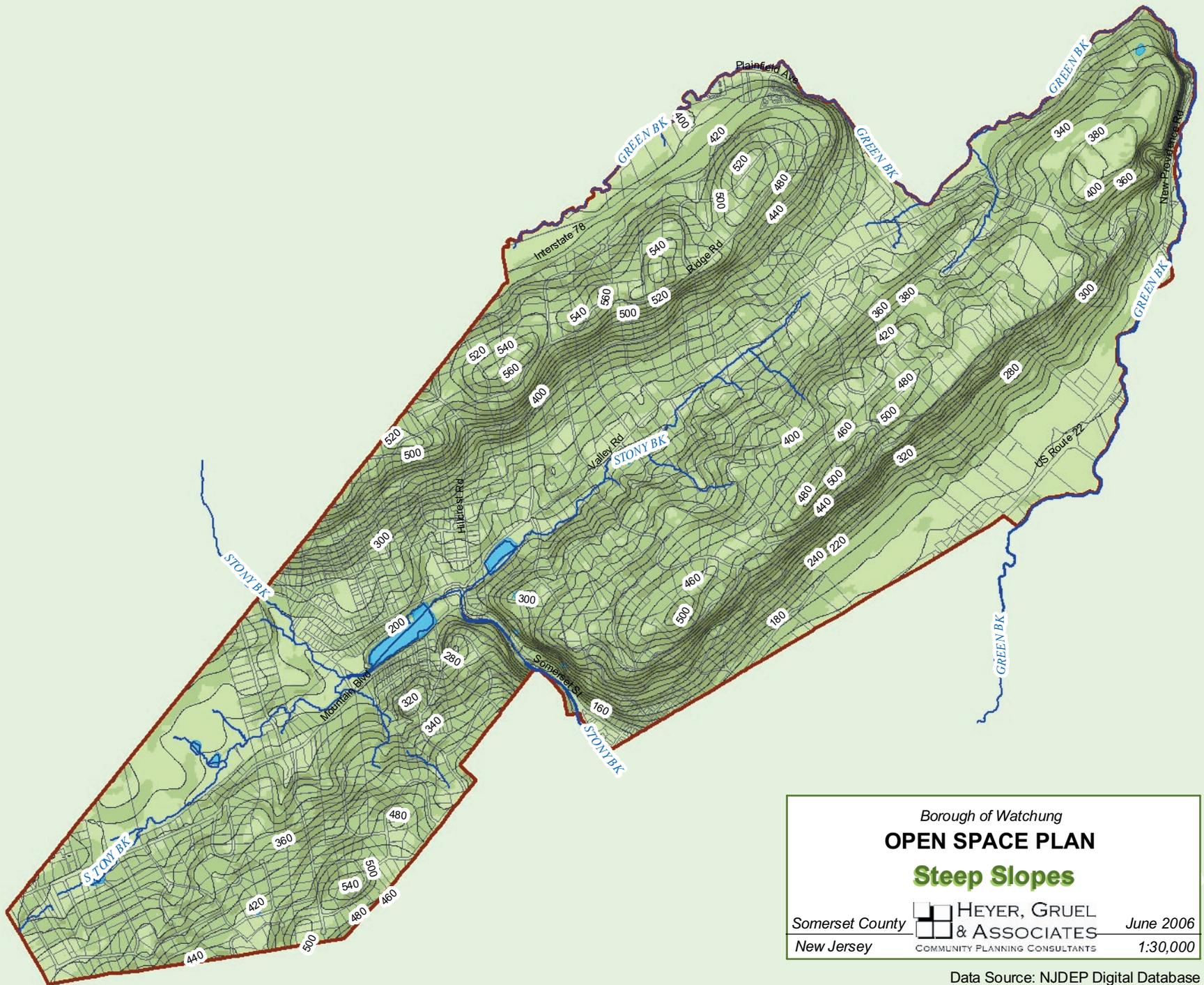
Impervious surfaces, such as buildings, roads, and parking lots, combined with steep slopes and fast-flowing Green Brook and Stony Brook have been cited as contributing to the disastrous floods in the past.

Caution should be exercised when planning in areas with steeply sloped terrain. Disturbances to plant vegetation can cause soil erosion, which in turn can pollute streams and cause sedimentation problems. Likewise, alteration in drainage patterns and increases in the amount and speed of runoff and can cause erosion, soil creep, slumping (sections of soil shifting down and outward on the slope), and landslides. For the most part, development should be avoided on steep slopes to avoid these problems and to conserve what are in many cases aesthetic corridors these natural landforms provide.

Legend

Percent Slope

- 0 - 2.0
- 2.1 - 5.0
- 5.1 - 10.0
- 10.1 - 15.0
- 15.1 - 25.0
- 25.1 - 100.0



Borough of Watchung
OPEN SPACE PLAN
Steep Slopes

Somerset County  **HEYER, GRUEL & ASSOCIATES** June 2006
New Jersey COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: NJDEP Digital Database

Wetlands

Wetlands, land which is either submerged or retains water at ground level for a portion of the year, includes marshes, swamps, and bogs. Wetlands cover approximately 165 acres of land in the Borough as identified in the Wetlands map.

Wetland areas provide natural flood control by storing excess water and releasing it to surface waters over time. Wetlands also serve as filtration systems, removing pollutants from the water table and storing them in biomass; and they serve as ground water recharge areas. As the total wetland area decreases and their natural functions decrease over a period of years, the overall quality and quantity of the surface water flow within the watershed is altered. Often, expensive man-made utilities are required to make up for the loss of wetlands.

A community that incorporates growth while maintaining or improving wetlands and wetlands function can achieve lower flood peaks, fewer drought periods, more wildlife and wildlife habitat, and better surface water quality than comparable watersheds with fewer wetlands. Wetlands also provide recreational opportunities for boating, hiking and bird watching.

Environmental Resource Inventory

Freshwater wetlands protection is governed by section 404 of the “Federal Water Pollution Control Act Amendments of 1972” as amended by the “Clean Water Act of 1977”. The Freshwater Wetlands Protection Act requires NJDEP to regulate virtually all activities proposed in the wetland, including cutting of vegetation, dredging, excavation or removal of soil, drainage or disturbance of the water level, filling or discharge of any materials, driving of pilings, and placing of obstructions. If you want to pursue activities in an area within 150 feet of a wetland, you may be in a transition area (sometimes called a buffer) and you may need a DEP transition area waiver. A transition area is a strip of land bordering the wetlands. The width of the transition area may vary from 150 feet down to nothing, depending on the value of the particular wetland. For example, a wetland containing endangered species habitat would require a 150-foot wide transition area, whereas a small wetland in a ditch might not require any transition area at all. Most freshwater wetlands require a 50-foot transition area.

NJDEP has developed a system for the classification of freshwater wetlands based upon criteria, which distinguish among wetlands of exceptional resource value, intermediate resource value, and ordinary resource value. Freshwater wetlands of exceptional resource value shall be freshwater wetlands, which exhibit any of the following characteristics:

1. Those which discharge into FW-1 water and FW-2 trout production (TP) waters and their tributaries; or
2. Those which are present habitats for threatened or endangered species, or those which are documented habitats for threatened or endangered species which remain suitable for breeding, resting, or feeding by these species during the normal period these species would use the habitat. A habitat shall be considered a documented habitat if the department makes a finding that the habitat remains suitable for use by the specific documented threatened and endangered species, based upon information available to it, including but not limited to, information submitted by an applicant for a freshwater wetlands permit. An applicant shall have the opportunity to request the department that a documented habitat not result in the classification of a freshwater wetland as a freshwater wetland of exceptional value if the applicant can demonstrate the loss of one or more requirements of the specific documented threatened or endangered species, including, but not limited to wetlands or overall habitat size, water quality, or vegetation density or diversity.

Environmental Resource Inventory

Freshwater wetlands of ordinary value shall be freshwater wetlands, which do not exhibit the characteristics enumerated in subsection a. of this section, and which are certain isolated wetlands, man-made drainage ditches, swales, or detention facilities. By default, freshwater wetlands of intermediate resource value are all freshwater wetlands not considered ordinary or exceptional.

There are many small activities that can be pursued in a transition area under general permits, like the general permits discussed above, for activities in freshwater wetlands. In addition, in some cases the transition area's shape may be altered to allow an activity, without diminishing its total size. This is called transition area averaging.

Wetlands have certain characteristics that provide benefits to surrounding communities; as such, care should be taken to protect them. They provide natural flood and stormwater control by slowing water runoff and temporarily storing excess water and slowly releasing it to surface waters. They can serve as chemical and biological purifiers, as well as sediment filtration systems, removing and storing silt and organic matter and from water to protect downstream water quality. Wetlands provide breeding, nesting and feeding grounds for a diversity of wildlife, including migratory waterfowl. As the total area of wetlands and their natural functions decrease, the overall quality and quantity of surface water is altered. Often, expensive man-made utilities are required to make up for the loss of wetlands. Fisheries, recreation, open space and aesthetic, education and scientific research.

In the map of Environmental Constraints, it can be observed that the 100-year flood prone areas almost overlap the wetland boundaries. The wetlands absorb a significant amount of runoff into the ground during overflow and flooding events. So it is important to protect wetlands to prevent flooding and to provide protection of adjacent developed areas.

Another important role of wetlands is to allow recharge of ground water aquifers. The wetlands are composed of hydric soils (soils that are saturated with water) that can be of two types - discharge hydric soils, which release ground water to the land surface, or recharge hydric soils, which allow water to percolate to ground water/aquifer. Sometimes the discharge hydric soils may also function as season dependent recharge systems. In Watchung, the wetlands and accompanying hydric soils, composed of Bowmansville, Parsippany, Croton series, are located along Stony Brook and Green Brook.

Flood Plains

Floodplains are a vital part of any river or estuary ecosystem, acting as water filters and wildlife nurseries. They are important for the maintenance of water quality, providing fresh water to wetlands and backwaters while diluting salts and nutrients. Floodplains are major centers of biological life in the river and estuary ecosystem and improve the overall health of the habitat used by many species of birds, fish, and plants. They are important biologically, as they represent areas where many species reproduce and as such are important for breeding and regeneration cycles.

In Watchung Borough, the floodplain of Stony Brook lies along Valley Road, Mountain Boulevard and Somerset Street, and that of Green Brook along US Route 22. Both these floodplains together cover approximately 220 acres of land in the Borough as identified in the Floodplains map.

The 1932 report by the State Water Policy Commission states that "Green Brook and Stony Brook are quick-acting, flashy streams subject to high rates of runoff and quick response to excessive rainfall". The Green Brook originates on the steep slopes of the Watchung Mountains in the Lower Raritan WMA and during heavy rains the storm water runs off the Watchung Mountains relatively quickly and slows as it reaches both the Green Brook and Stony Brook valley bottoms where numerous commercial, industrial and residential developments are located. The slopes of the Watchung Mountains and

inadequate existing channels in the Green Brook and Stony Brook watersheds have led to large and sudden flood flows. Also, channels in the Green Brook valley are flat and cannot handle fast-flowing storm water.

The Green Brook Flood Control Project was started in 1977 with a \$400 million as an effort to prevent floods in Middlesex, Somerset and Union counties. The Green Brook project is the largest flood-control project in the country outside the Mississippi River region. About 78,000 feet of levees and floodwalls, 20,700 feet of channel modifications, 16 pump stations, 21 bridge and road modification and two detention basins over a 65-square-mile area in three counties are planned as part of the project.

Riparian areas are transitional land areas between uplands and streams that serve a wide variety of functions. Impaired riparian zones or streams without riparian areas do not receive protection from negative influences such as polluted surface water runoff or stream bank erosion. Natural riparian areas help preserve land areas along streams, rivers and other water bodies that can be used for open space and recreational uses.

The 100-year floodplain boundary area has been established by the Federal Emergency Management Administration (FEMA) to denote floodwater impoundment areas. These areas are highly restrictive in order to avoid destruction of flood areas and the destruction of property that has been improperly located and therefore subject to flooding. FEMA

Environmental Resource Inventory

designates different flood hazard areas according to the chance of annual flooding.

The Borough of Watchung has the following FEMA flood hazard zones within its boundaries:

Zone A

Zone A is the flood insurance rate zone that corresponds to the 1-percent annual chance floodplains that are determined in the Flood Insurance Study by approximate methods of analysis. Because detailed hydraulic analyses are not performed for such areas, no Base Flood Elevations or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

Zone AE

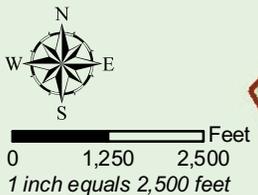
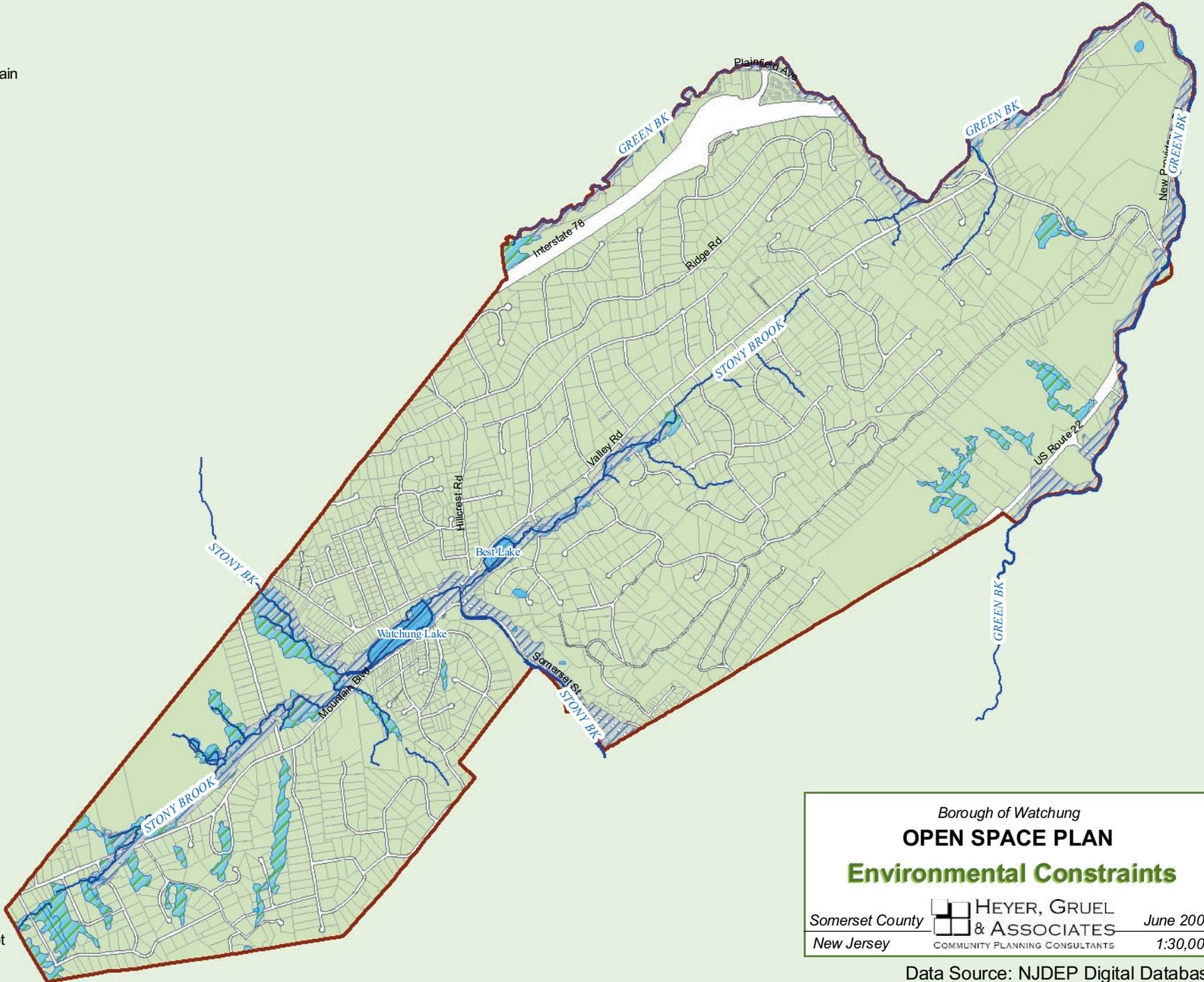
Zones AE is the flood insurance rate zone that correspond to the 1-percent annual chance floodplains that are determined in the Flood Insurance Study by detailed methods of analysis. In most instances, Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

Zone X

Zones X is the flood insurance rate zone that corresponds to areas outside the 1-percent annual chance floodplain, areas of 1-percent annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1-percent annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1-percent annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in this zone.

Legend

-  Wetlands
-  100-Year Floodplain
-  Lakes
-  Streams



Borough of Watchung
OPEN SPACE PLAN
Environmental Constraints

Somerset County	 HEYER, GRUEL & ASSOCIATES	June 2006
New Jersey	COMMUNITY PLANNING CONSULTANTS	1:30,000

Data Source: NJDEP Digital Database

Groundwater Aquifers

An aquifer is an underground layer of water-bearing permeable rock, or unconsolidated materials (gravel, sand, silt, or clay) from which groundwater can be usefully extracted using water wells or springs. Aquifers in New Jersey have been ranked on their ability to yield ground water to over 8,000 high-capacity wells, including water-supply, irrigation, and industrial-supply wells sited and tested for maximum yield.

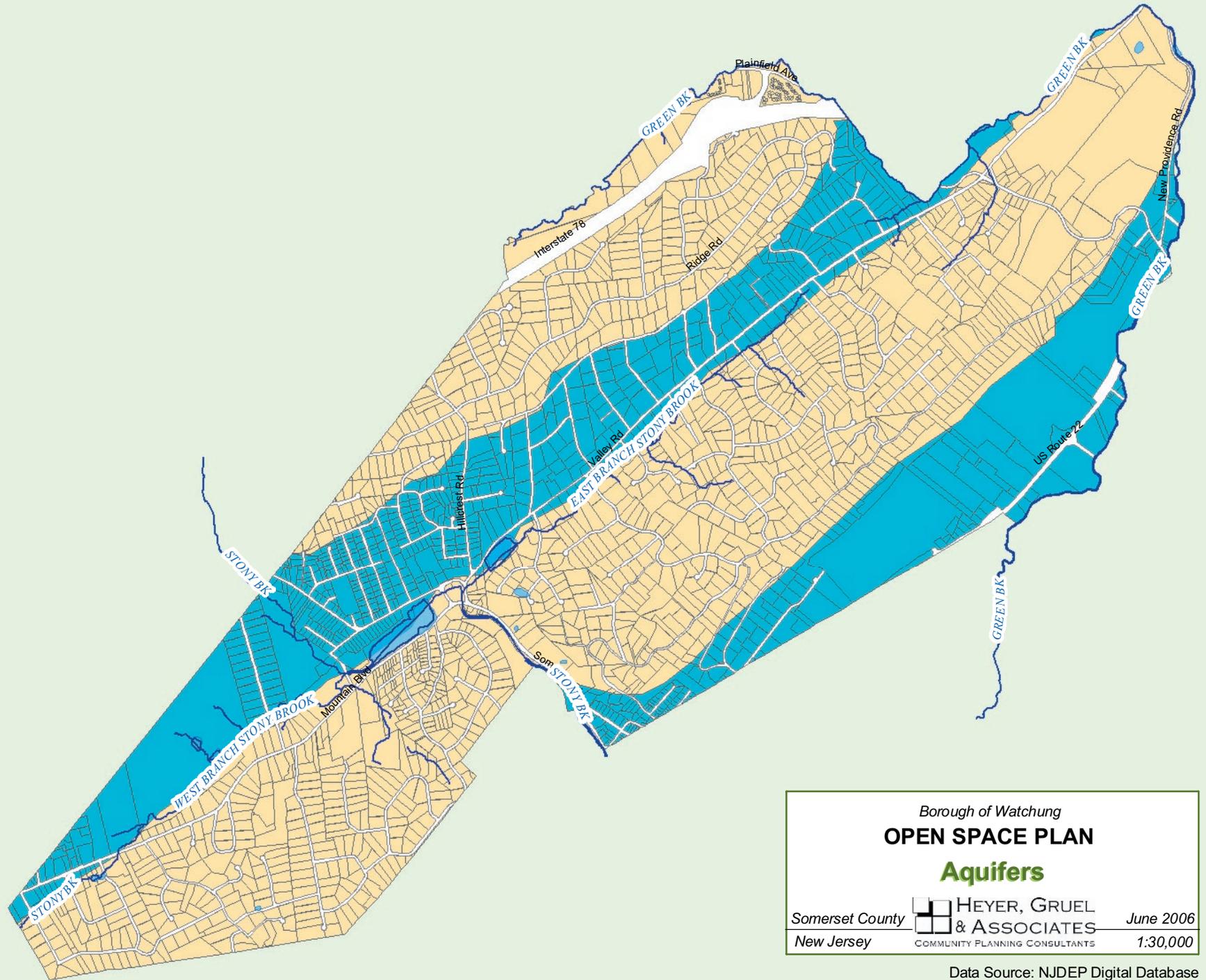
The groundwater aquifers found in the Borough of Watchung belong to the fractured-rock aquifers of the Newark Basin part of the Piedmont. The two types, Basalt and Brunswick Aquifer, are found in alternating strips running northeast-southwest.

1. Basalt – This aquifer is composed of hard, dense, and highly-fractured igneous rocks. Ground water stored and transmitted in fractures. Water is normally fresh, slightly- to highly- alkaline, moderately hard, and of the calcium-bicarbonate type. This has an aquifer rank of “D” and an average yield of 25 to 100 gallons per minute. It covers approximately 2,560 acres or 67% of total land area in the Borough.
2. Brunswick Aquifer – Located along the Stony Brook and Green Brook streams, this aquifer has an aquifer rank of “C” and an average yield of 101 to 250 gallons per minute. It is composed of sandstone, siltstone, and shale of the Passaic, Towaco, Felville, and Boonton Formations. The water from this aquifer is normally fresh, slightly alkaline, non-corrosive and hard, containing calcium-bicarbonate and sub-ordinate calcium-sulfate waters that are associated with high total dissolved solids. It covers approximately 1,280 acres or 33% of total land area in the Borough.

Legend

Aquifers

- Basalt
- Brunswick Aquifer



Borough of Watchung
OPEN SPACE PLAN
Aquifers

Somerset County  HEYER, GRUEL
New Jersey & ASSOCIATES
COMMUNITY PLANNING CONSULTANTS

June 2006
1:30,000

Data Source: NJDEP Digital Database

Ground Water Recharge

Ground Water Recharge areas are where water from precipitation is transmitted downward to an aquifer. It supports aquifer recharge, stream baseflow and wetlands. Most areas, unless composed of solid rock or covered by development, allow a certain percentage of total precipitation to reach the water table. The recharge areas of Borough of Watchung are classified in the following table:

Rank	Recharge	Acres	Soil Series	Location
A	17 to 21 in/yr	460	Neshaminy–Mt. Lucas	Along Somerset Street/Stony Brook, south of Johnston Drive and Ridge Road, and in smaller areas south of Plainfield Avenue and between Valley Road and Johnston Drive.
B	12 to 16 in/yr	2388	Neshaminy–Mt. Lucas, Penn, Neshaminy, Rowland, Mt.Lucas–Watchung, Amwell, Reaville, Rowland,	Mainly south of Stony Brook, spread throughout the Borough between other recharge areas.
C	9 to 11 in/yr	388	Mt.Lucas–Watchung, Amwell	Large areas north of Mountain Boulevard and along Johnston Drive. Also present in the Lockheed Electronics Co. CEA.
D	1 to 8 in/yr	156	Amwell, Birdsboro, Mt.Lucas–Watchung,	Along US Route 22.
L	Hydric Soils	166	Parsippany, Bowmansville, Croton,	Along Stony Brook south of Valley Road, along Green Brook south of US Route 22, and along Vail Lane.
W	Wetlands	125	Mt.Lucas–Watchung, Amwell Rowland, Neshaminy–Mt.Lucas, Birdsboro,	Largely in southern part of Watchung along west bound Stony Brook.
X	Areas with no recharge calculations	164		Concentrated in the Weldon Quarry area

Environmental Resource Inventory

The quality of ground water recharged to the water table depends on the presence of Known Contaminated Sites or sites on the Site Remediation Program (SRP) Comprehensive Site List where groundwater contamination has been identified. Such areas, known as Classification Exception Area (CEA), are institutional controls in geographically defined areas within which the New Jersey Ground Water Quality Standards (NJGWQS) for specific contaminants have been exceeded.

The Borough of Watchung had one such CEA on the Lockheed Electronics Co. site, now Watchung Square, located at 1501 US Route 22. The area defined for control was 98 acres in size and 400 feet deep. The potable water in this area was contaminated by Trichloroethylene and a well restriction had been declared in the area impacted by this CEA.

Legend

 Classification Exception Area (CEA)

Ground Water Recharge Areas

Inches / Year

 17 to 21

 12 to 16

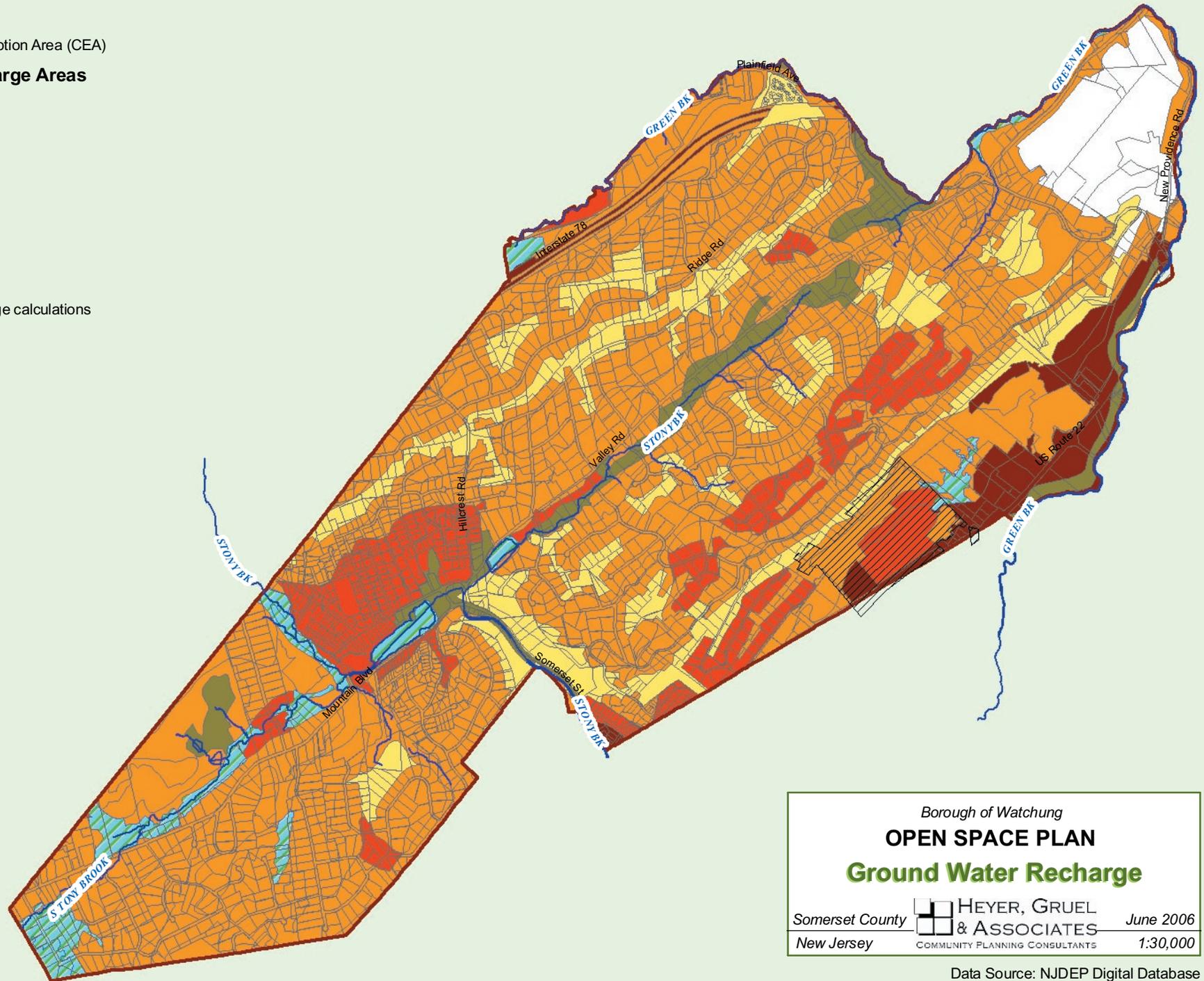
 9 to 11

 1 to 8

 Hydric soils

 Wetlands

 Areas of no recharge calculations



0 1,250 2,500 Feet
1 inch equals 2,500 feet

Borough of Watchung
OPEN SPACE PLAN
Ground Water Recharge

Somerset County  HEYER, GRUEL
New Jersey & ASSOCIATES June 2006
COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: NJDEP Digital Database

Species and Habitats

Watchung Borough lies in the Piedmont Plains “landscape region” which is described as “large land areas that are ecologically similar with regard to their plant and animal communities” by the New Jersey Division of Fish and Wildlife. The Endangered and Non-game Species Program has identified and mapped areas of critical importance for imperiled species within each landscape region. The project also ranks habitats based on the conservation status of species present. The map of Critical Species and Habitats shows these regions within the Borough of Watchung.

The Wood Turtle habitat includes 0.2 miles-wide stream buffers and all wetlands within one mile of a sighting. Watchung has a total of 252 acres of State Threatened Wood Turtle habitats. About 80 acres of the habitat is found around Watchung Lake and there has been one recorded wood turtle sighting per patch. The other large area lies in the northern part of the Borough between the quarry and Green Brook. This is a large 172-acre habitat with 10 sightings per patch.

Emergent Wetland, Forested Wetland, and Forest depict critical area maps for dependent species, which are generated by intersecting imperiled, and priority species data with NJDEP 1995/97 Land use/Land cover Update. The Borough of Watchung has a total of 3 acres of suitable emergent wetland found in the southern-most part of the

borough. Forested Wetland is mostly found south of Watchung Lake along Stony Brook. Watchung has a total of 149 acres of forested wetland, of which 144 acres is Suitable Habitat and only about 5 acres is State Threatened.

The Borough of Watchung has 645 acres of Forest habitat, of which 95 acres is Suitable Habitat, 420 acres is Priority Concern and 130 acres is State Threatened area. The State Threatened Forest area is located along south of I-78 and Green Brook. The Priority Concern Forest area is located between Valley Road and US 22 north of Somerset Street. Suitable Forest Habitat is found south of Watchung Lake.

Legend

Wood Turtle Habitat

Emergent Wetland

RANK

- Suitable Habitat (1)
- Priority Species (2)
- State Threatened (3)
- State Endangered (4)
- Federal T and E (5)

Forest

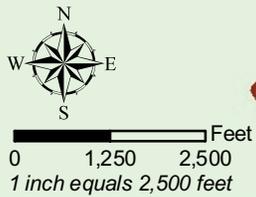
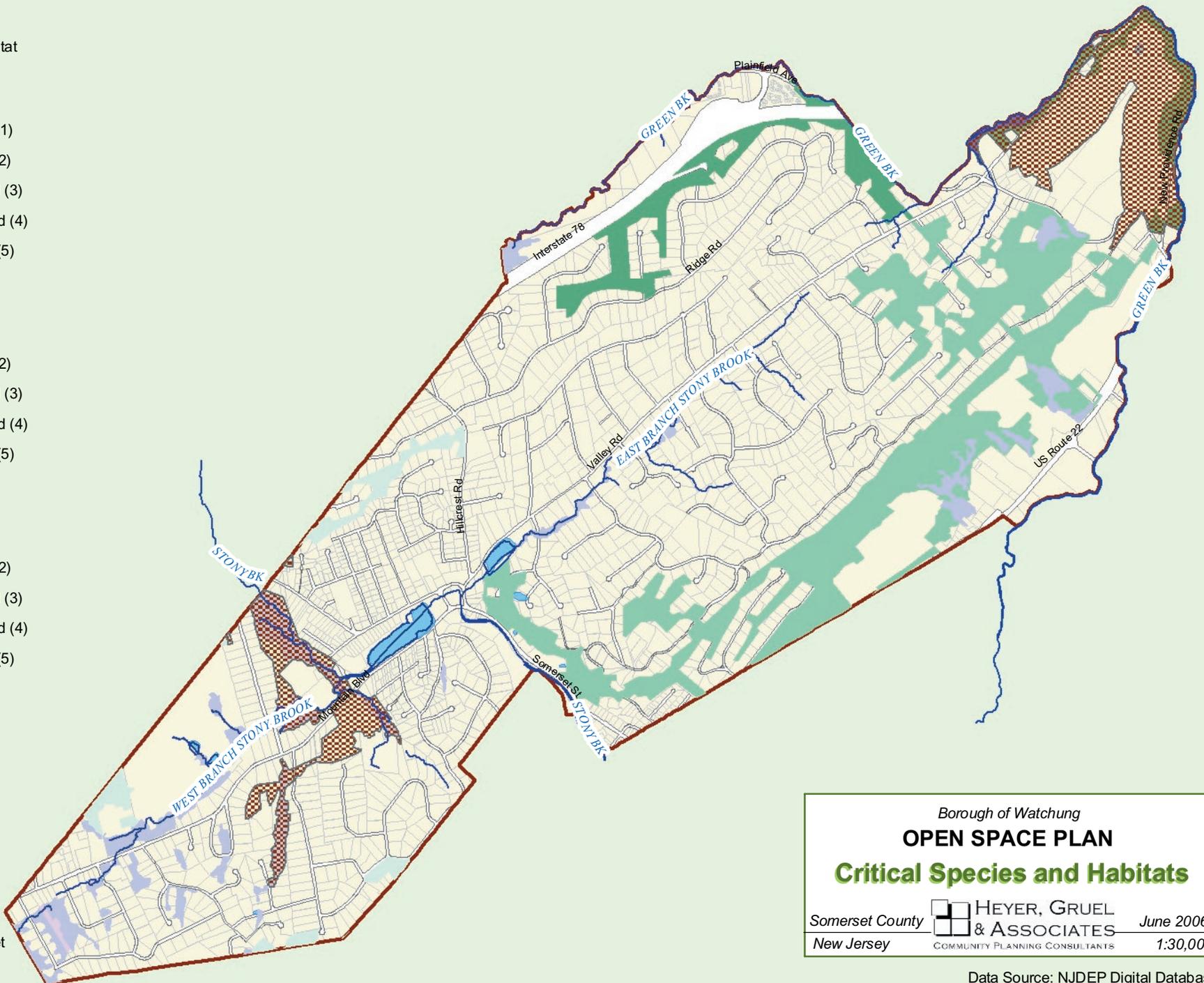
RANK

- Suitable (1)
- Priority Species (2)
- State Threatened (3)
- State Endangered (4)
- Federal T and E (5)

Forested Wetland

RANK

- Suitable (1)
- Priority Species (2)
- State Threatened (3)
- State Endangered (4)
- Federal T and E (5)



Borough of Watchung
OPEN SPACE PLAN
Critical Species and Habitats

Somerset County HEYER, GRUEL & ASSOCIATES June 2006
 New Jersey COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: NJDEP Digital Database

Critical and Priority Sites

The Critical Environmental and Historic Sites (CEHS) are areas, generally less than one square mile, which include one, or more, environmentally or historically sensitive features and are recognized by the State Planning Commission in the NJ State Development and Redevelopment Plan (NJSDRP). In Watchung, the Critical Environmental Sites identified in the 1992 State Plan (P1) extend over 400 acres mainly along Green Brook and the quarry site in the north, and along Stony Brook and the Twin Brooks Country Club.

The Weldon Quarry area is designated as a CES by NJDEP in its CEHS Digital Data, and there appears to be a conflict between the Borough and the State regarding this designation as noted in the Final Somerset County Cross-acceptance Report, March 2005. The Borough plans to develop the site as an office/hotel/conference center to benefit from the site's location, accessibility and size.

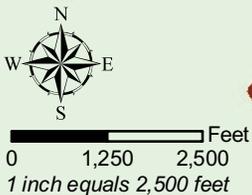
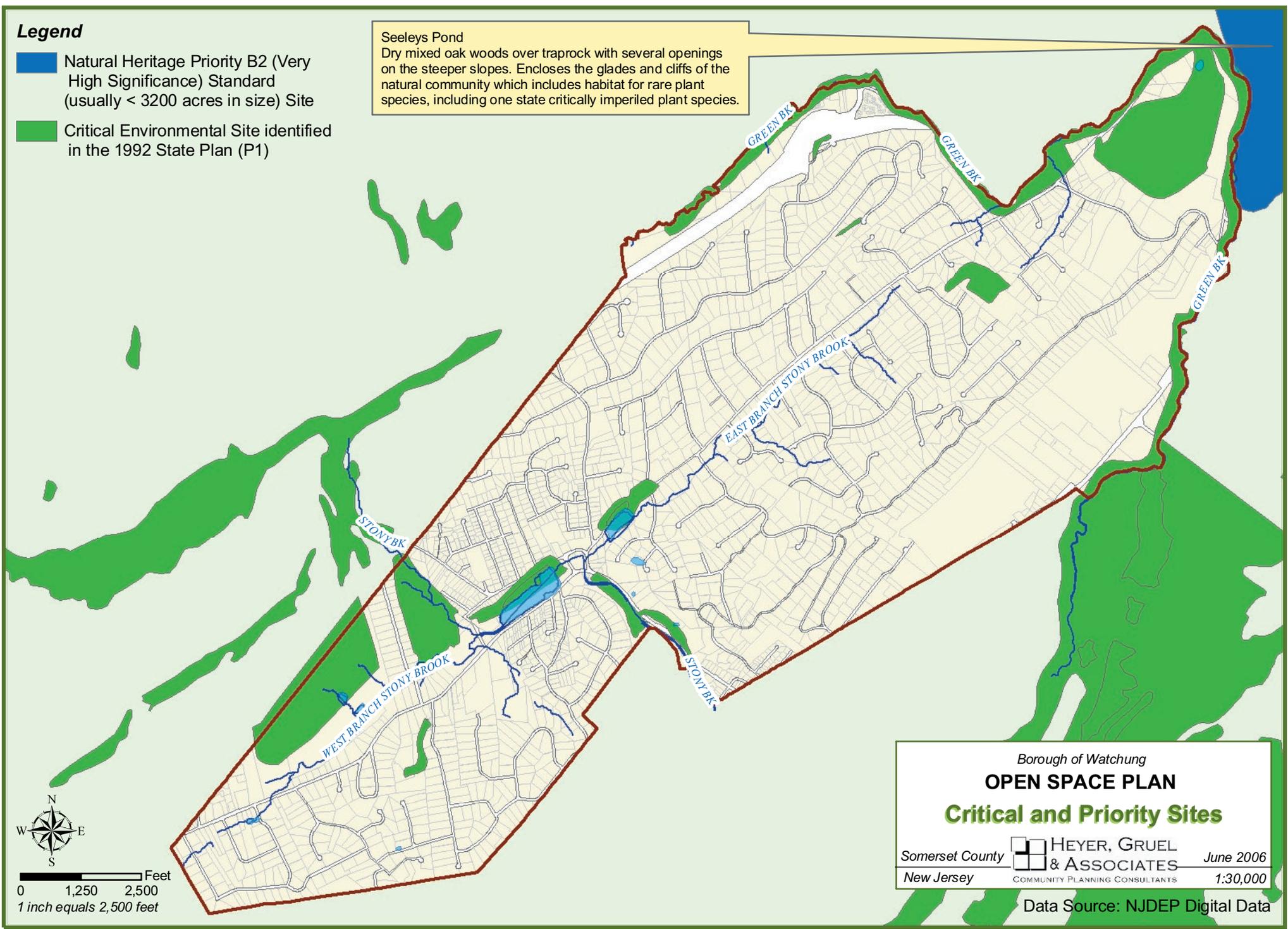
Seeleys Pond lies along the northern edge of the Borough of Watchung, and extends across the Green Brook into Scotch Plains Township and Berkeley Heights Township. Spread over 204 acres, this is a Priority B2 (Very High Significance) Standard (< 3,200 acres in size) site important for its dry mixed oak woods over traprock with several openings on the steeper slopes. The site encloses the glades and cliffs of the natural community, which includes habitat for rare plant species, including one state critically imperiled plant species.

Legend

 Natural Heritage Priority B2 (Very High Significance) Standard (usually < 3200 acres in size) Site

 Critical Environmental Site identified in the 1992 State Plan (P1)

Seeleys Pond
Dry mixed oak woods over traprock with several openings on the steeper slopes. Encloses the glades and cliffs of the natural community which includes habitat for rare plant species, including one state critically imperiled plant species.



Borough of Watchung
OPEN SPACE PLAN
Critical and Priority Sites

Somerset County  HEYER, GRUEL & ASSOCIATES June 2006
New Jersey COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: NJDEP Digital Data

Historic and Cultural Resources

The Borough of Watchung has a long and rich history. The preservation of historical resources is an extremely important component of the social fabric of communities and Watchung Borough should be actively engaging in preservation efforts

<u>Number</u>	<u>Block/Lot</u>	<u>Site</u>	<u>Location</u>	<u>Circa</u>	<u>State/National Eligibility</u>
1	3.01/30	Coon House (Santucci/ Neumann House)	676-680 Mountain Boulevard	C-1732	Yes
2	4.01/9	Martoccia House	Mountain Boulevard	unknown	-
3	12.01/4	The Coslick Home	293 Mountain Boulevard	C-1820	-
4	26.01/1	Formerly Catterlin's Tavern	105 Brookdale Road	C-1700	-
5	24.01/21 24.01/21	Water+Wine (Formerly The Red Wheel Road House) Cemetery (21 Markers in August 1937)	141 Stirling Road 141 Stirling Road	Unknown C-1797	- -
6	16.04/ 15.01	Municipal Building (Stone Wall Originally from Grist Mill; "Vandoren 1823 Cut Into Wall)	Mountain Boulevard	unknown	--
7	24.02/ 1.01	Texier House (Former Police Station)	10 Mountain Boulevard	C-1800	-
8	24.02/3	Glass Factory (Guinard's) Retail Office	Stirling Road	C-1850	-
9	43.01/9	Murray House	104 Hillcrest Road	C-1919	-

Environmental Resource Inventory

<u>Number</u>	<u>Block/Lot</u>	<u>Site</u>	<u>Location</u>	<u>Circa</u>	<u>State/National Eligibility</u>
10	44.01/2	Viebrock House	978 Somerset Street	C-1750	Yes
11	47.01/ 3&4	Ornate Italiannate	758-760 Somerset Street	C-1840/1880	-
12	44.01/5	Watchung Arts Center (Original Building Old)	Somerset Street	C-1850/1870	-
13	43.01/1	Wilson Memorial Chapel	7 Valley Road	C-1889 (by stone over door)	-
14	43.01/35	Demler House	109 Valley Road	C-1913	-
15	43.07/8	Drake House	253 Valley Road	C-1740-1760	
16	68.01/6	Arron Allen	260 Valley Road	C-Late 1700's	Possible
17	43.08/14	Elias Allen House	301 Valley Road	C-1747	-
18	70.02/1	Wells Farmhouse	537 Valley Road	C-1770	Yes

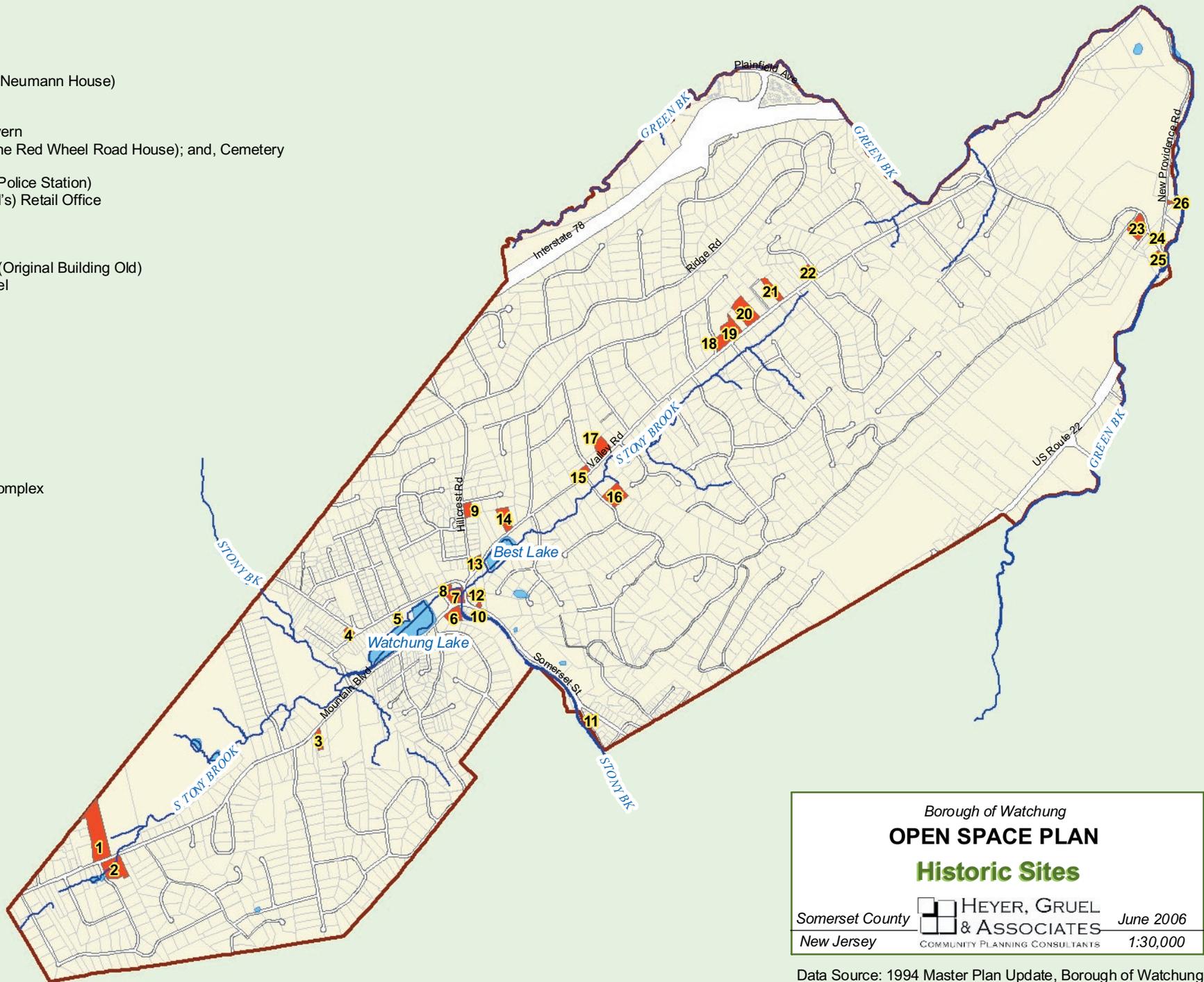
Environmental Resource Inventory

<u>Number</u>	<u>Block/Lot</u>	<u>Site</u>	<u>Location</u>	<u>Circa</u>	<u>State/National Eligibility</u>
19	70.02/2	Moldenke House	561 Valley Road	C-1780 –first floor C-1850 –second floor	-
20	70.02/4	Wellbrock (Moved back from Road in 1920)	601 Valley Road	C-1760 Mansard-1800's	-
21	71.00/5	Converted Barn	653 Valley Road	C-1800 (?)	-
22	71.00/12	Former Ripley House	717 Valley Road	C- Early 19 th Century	-
23	64.03/18	Hollingworth Home (Built By John Spencer)	1370 Johnston Drive/ Bonnie Burn Road	C-Late 19 th Century Mansard	-
24	76.01/2	48 Bonnie Burn Road	48 Bonnie Burn Road	Unknown	-
25	64.04/3.01	Darby Company Mill Complex	33 Bonnie Burn Road	C-1812	Yes
26	78.01/3	Sockwell House	80 New Providence Road		

Legend

 Historic Sites

- 1 Coon House (Santucci/ Neumann House)
- 2 Martoccia House
- 3 The Coslick Home
- 4 Formerly Catterlin's Tavern
- 5 Lake Edge (Formerly The Red Wheel Road House); and, Cemetery
- 6 Municipal Building
- 7 Texier House (Former Police Station)
- 8 Glass Factory (Guinard's) Retail Office
- 9 Murray House
- 10 Viebrock House
- 11 Ornatte Italiannate
- 12 Watchung Arts Center (Original Building Old)
- 13 Wilson Memorial Chapel
- 14 Demler House
- 15 Drake House
- 16 Arron Allen
- 17 Elias Allen House
- 18 Wells Farmhouse
- 19 Moldenke House
- 20 Wellbrock
- 21 Converted Barn
- 22 Former Ripley House
- 23 Hollingworth Home
- 24 48 Bonnie Burn Road
- 25 Darby Company Mill Complex
- 26 Sockwell House



Borough of Watchung
OPEN SPACE PLAN
Historic Sites

Somerset County  HEYER, GRUEL
 New Jersey & ASSOCIATES June 2006
 COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: 1994 Master Plan Update, Borough of Watchung

Scenic Resources

Watchung Borough regards its scenic vistas as an important natural resource and they are greatly valued. They provide opportunities for passive recreation and sightseeing with sightlines of the “Plainfields” and New York City.

Scenic Roadways are rural lanes that have developed over time, primarily as farm roads leading from farms to markets. The area designated as scenic roadways can be in a way to help preserve their natural and cultural importance. Scenic Roadways are designed to:

- Preserve and encourage the restoration of the natural setting along the roadways
- Provide views of significant landscape features such as agricultural land and associated facilities

Environmental Resource Inventory

It is also important that wherever historical sites, parks and recreational and other public uses exist along the scenic roadway, efforts should be made to continue the scenic qualities to drives and access ways leading into these historic, cultural and open space sites. The scenic roadways could act as linkages within the Borough's open space network.

The planning efforts have outlined strategies to support measures to protect scenic views, especially those viewed from public spaces such as parks and roads. There are seven distinctive scenic views that have been identified throughout Watchung Borough. Scenic roadways within Watchung Borough include:

1. New Providence Road from Bonnie Burn Road north to Valley Road
2. Bonnie Burn Road
3. Johnston Drive along ridge
4. Valley Road
5. Mountain Boulevard
6. Watchung Lake
7. Best Lake
8. Village Center
9. Old Wetumpka Falls on the Stony Brook

Policy initiatives such as ordinances or land development regulations could include standards designed to ensure preservation of the scenic value of designated roadways such as identification of permissible adjacent land uses, location and heights of structure, establishment of "scenic easements", landscaping requirements, access controls, signage, and placement of utilities. Active beautification and management measures could include landscaping within the public right-of-way, establishment of speed limits along the designated route, the potential for multiple-use of the scenic roadway such as bikeways and pedestrian walkways, the design and placement of information and directional signs, and needed roadway improvements.

Open Space Needs Assessment



Parkland Deficits

Watchung Borough is approximately 6 square miles or 3,850 acres in size and is primarily a residential Borough that is almost fully developed. The population of Watchung Borough was 5,613 in 2000.

There are a total of 109.88 acres of publicly-owned open space in Watchung Borough. Of these, the Borough of Watchung owns 67.13 acres and 6.82 acres are owned by Somerset County. There are 1.63 acres of Open Space in State ownership through the DOT and 3.83 acres under Union County Park Commission ownership in the County. There are also 30.47 acres of recreational open space owned by the Watchung Board of Education.

The New Jersey Open Space and Outdoor Recreation Plan recommends 3% of net developable area be set aside for Municipal Open Space. This would set a goal of 95 acres of municipal open space for Watchung Borough. Using this calculation, Watchung Borough has a total deficit of 28.09 acres, since the Borough currently holds 67.13 acres as open space. However, the Watchung Board of Education currently holds 30.47 acres of active recreation lands available for public use. As long as these lands remain available for public use, the Borough would have 97.6 acres of open space, exceeding the state standard by 2.6 acres. 3,174 acres can be considered developable after constrained lands, such as wetlands, floodplains, and roadways have

been removed.

The New Jersey Open Space and Recreation Plan recommends that 7% of developed and developable land be used for County Parkland. This would set a goal of 222 acres of county open space for Watchung Borough. Using this calculation, Watchung Borough has a total deficit of 211.34 acres, since counties currently hold only 10.67 acres as open space. Clearly, the County should do more in the Borough to protect additional open space in an effort to meet state standards. 3,174 acres can be considered developable after constrained lands, such as wetlands, floodplains, and roadways have been removed.

The National Recreation and Parks Association (NRPA) suggest that a park system, at a minimum, be composed of a core system of parklands with a total of 6.25 acres to 10.5 acres of developed open space per 1,000 population. This results in an overall minimum of 35 to 59 acres for the Borough. Watchung Borough has 73.41 acres of active recreation lands, within the range of the NRPA guidelines.

Open Space Needs Assessment

Borough of Watchung – Active Recreation

Name	Block	Lot	Location	Area (acres)
"Camp Endeavor"	69.08	22	Sequoia Drive	9.19
Best Lake and Park	44.01	8.01	Valley Road	10.43
Mobus Field / Watchung Lake	24.01	4.01	Brookdale Road	3.30
Mobus Field / Watchung Lake	24.01	4.02	Brookdale Road	0.30
Veterans Memorial Park	47.01	1	770 Somerset Street	0.10
Watchung Lake	24.01	1.01	Mountain Blvd.	19.62
				Total 42.92

Watchung Board of Education – Active Recreation

Name	Block	Lot	Location	Area (acres)
Phillips Field	3.02	1	Brookdale Road	30.47

The NRPA also has further recommendations for different types of open space that provide a comprehensive recreation and open space infrastructure for a community. These include mini-parks or vest pocket parks, neighborhood park or playgrounds, community parks, regional parks and regional preserves.

Vacant Land

Attached to this report is an appendix of all known vacant lands in Watchung Borough derived from tax records. This chart is divided into three categories of possible open space use, constrained lands to be acquired for natural resource protection, vacant properties in residential areas suitable for pocket and neighborhood parks, and isolated lots suitable for open space reserve lands.

For conservation purposes, vacant lands are important assets that, hopefully, still have native vegetation and intact species habitat on them. If these properties have never been developed then they are more likely to harbor natural land cover. They will also have a real property value much less than developed properties in the borough, allowing more acres to be put into open space protection than would be possible for more expensive properties with the same expenditure of scarce public dollars.

Vacant lands are also the most easily acquired and developed as active recreation sites. Any expenses not accrued for demolition and clean up of a site can be spent on development of recreation facilities.

Opportunities



Open Space and Recreation Opportunities

Possible Acquisition Projects

1. Ness Property (Block 3.01, Lot29) 19.8 acres
2. Stony Brook River Corridor Conservation Area (Block 16.04 Lots 17.01, 17.02, 18, 19, 20.02, 20.03, 21; Block 46.02 Lots 1, 2) 16.86 acres
3. Vacant Parcels - Critical Areas (Various Lots) 41.43 acres
4. Vacant Parcels - Pocket Parks (Various Lots) 10.03 acres
5. Connell Property (Block 75.01, Lot 1 through 7) 25.4 acres
6. Brook Hill Swim and Tennis Club (Block 70.01, Lots 2, 3, 4.01, 4.02, 5.01, 5.02, 5.03 and 5.04; Block 43.13 Lot 2) 35.7 acres

Easements and Agreements

7. Mt. St. Mary's
8. R.O.W. Trail
9. Entry Boulevards (Various Lots)

Redevelopment

10. Quarry Redevelopment (27 lots) 197.1 acres.

Existing Open Space

11. Phillips Field (Block 3.02, Lot 1) 3.5 acres

12. Camp Endeavor (Block 69.08, Lot 22) 9.6 acres

13. East Drive (Block 57.01 Lot 6.01) 6.4 acres

14. Village Center

Local, County and State funding sources are all available for open space acquisition and historic preservation.

Somerset County Open Space Trust Fund

Funds are set aside in four separate funds, as follows:

- County Open Space Acquisition Program – administered by the County Parks Commission – funds the direct acquisition of land for open space/parks and recreation under County ownership.
- County Agricultural Preservation Program – administered by the County Agricultural Development Board – to acquire development rights for farmland preservation.

Opportunities

- Open Space Partnership Program – administered by the County Planning Board – designed as a program open to municipalities for grants (no matching funds required) for local open space acquisition. Sites may be purchased in fee or easements may be acquired. Sites with structures may also be purchased if the structures will be dedicated to recreation purposes. Sites with structures in flood hazard areas may also qualify for funding using federal flood management funding sources.
- Historic Preservation Program – administered by the County Planning Board – to preserve historic sites.

Watchung Open Space Trust Fund

Local funds for open space acquisition may be generated through bonding, general appropriations or from the set-aside of funds raised through the open space tax. In 1998 Watchung voters approved a non-binding referendum approving the creation of a fund based upon a set-aside of property tax revenue to be devoted to acquiring, developing, and maintaining lands for open space, recreation, farmland preservation, and historic purposes. In response, the Borough Council enacted Ordinance 98-28 establishing the "Open Space Trust Fund." The ordinance also established a special tax rate of \$0.02 per \$100 of assessed property valuation. Commencing in 1999, the fund is expected to generate approximately \$180,000 annually.

See Implementation Tools for further discussion of State Funding Opportunities

Availability of Vacant Land

Watchung is a small suburban municipality of approximately 6.2 square miles located in the northeastern portion of Somerset County. With a year 2000 population of 5,613 persons and 2,155 housing units, the Borough of Watchung is primarily built-out. Substantial housing and population growth in the Borough started in the 1940's and continued in the following decades through 1970. The next several decades saw lower population and housing growth. The growth that has occurred in the Borough over the last several decades has rendered the Borough essentially "built out" - very little undeveloped or underdeveloped land remains within the Borough. New construction can occur as part of redevelopment projects through "teardowns" of dilapidated buildings in the Borough.

As indicated in the table below, the vast majority of the Borough is developed. Only 4% of the Borough consists of vacant land. The vast majority of the Borough's land area is committed to single-family residential use with almost 2,500 acres (70%) developed with such use. Multi-family residential development occupies another 1%. Commercial/office development occupies approximately 280 acres (8%) within the Borough and the quarry occupies 6% of the Borough. The remaining land is occupied by school properties (3%), public facility uses 1%, church and cemetery properties (1%), private open space (3%) and public open space (3%). The Borough owns the majority of the 44 acres of public property within the Borough.

Constraints



Constraints

Existing Land Use (rounded off to whole numbers)		
	Acres	Percent
Single-Family Residential	2,494	70%
Multi-Family Residential	38	1%
Commercial/Office	280	8%
School	92	3%
Church/Cemetery	39	1%
Public Facility	44	1%
Private Open Space/Recreation	122	3%
Public Open Space/Park/Recreation	101	3%
Quarry	219	6%
Vacant	137	4%

Virtually all of the 137 acres of vacant land is privately owned. However, as noted above, most of the vacant lots are affected by one or more significant development constraints such as a lack of sanitary sewers, lack of road frontage (i.e., “land-locked”) and/or the presence of steep slopes, floodplains or wetlands. These constraints are likely the reason why these properties have remained undeveloped and will likely contribute to these properties remaining vacant for the foreseeable future. Vacant lands so constrained include the vacant properties located along the northerly side of I-78 and

Constraints

a number of vacant parcels located on the hillside to the rear of the shopping centers along Route 22. These properties make up the majority of the vacant land acreage in the Borough. The breakup of all the vacant parcels in the Borough is given in the table below:

Type of Vacant Lots	Potential for -	Number of Parcels	Total Area (acres)
Isolated	Pocket parks	9	10.03
Development and/or Environmental Constraints	Preserved open space	22	70.11
Others	Urban development	46	55.97

Open Space & Recreation Plan



The 1999 Reexamination Report indicated a need for new, improved and expanded recreational facilities, specifically with respect to ball fields and tennis courts, as well as walking paths and trails. The 1999 Reexamination Report also recommended that the Borough conduct an inventory of open space in order to facilitate the planning of recreation facilities, walking paths and trails and other Borough community facilities in the future. The 1999 Reexamination Report recommended that the Master Plan reflect “general criteria for open space acquisition and any important parcels that should be acquired by the Borough.”

The 2005 Reexamination Report recommended that any subsequent Open Space and Recreation Plan should consider the open space and recreation related issues/ proposals that have been identified during the Master Plan reexamination process, which include:

- Adding additional baseball and softball fields
- Providing a new all purpose field for lacrosse, field hockey and soccer
- Building of an all-purpose recreation center
- Creating a bandstand for community concerts and plays
- Replacing the pavilion at Phillips/Mobus Field
- Creating a skate park
- Developing Camp Endeavor;

- Using the Ness Property for open space and/or recreation facilities in combination with other municipal needs
- Creating pedestrian and bike paths in a number of locations including around Phillips Field, along Somerset Street to provide a pedestrian link between the Circle and triangle areas, to provide links to nearby parks such as Watchung Reservation
- Providing more parking for Philips/Mobus Field

Open Space Acquisition Criteria

An Open Space Plan was prepared, dated May 2000, which identified potential opportunities for open space preservation and which contained acquisition criteria as recommended in the 1999 Reexamination Report. The 2000 Open Space Planning report created a list of criteria to be used for defining open space acquisition objectives.

- **Properties bordering streams and waterways should be preserved through purchase or conservation easements where appropriate.**
The preservation of stream corridors and other waterways is essential to protecting the water quality of streams and lakes, protecting potable water supplies, providing recreational opportunities for residents, and reduces the potential for flood losses.

Open Space and Recreation Plan

- Acquisition of environmentally sensitive sites such as areas with steeply sloping land, freshwater wetlands and wetland transition areas, and flood plains. The Master Plan contains an analysis of environmentally sensitive lands in the Borough and a Critical Areas Map depicting the location of steep slopes, wetlands and flood plains. Acquisition of sites such as these for permanent open space affords the opportunity to protect such areas from the negative effects of development.
- Acquisition of strategic properties bordering the gateway roads through the Borough and other “high visibility” sites that, if preserved, would have a significant beneficial impact on the character of the community. To a great extent, the gateway roads through the Borough define the character of the community and our visual environment. Ideally, the gateway roads should be tree-lined with large shade trees. Historic homesites should be preserved in their original settings, close to the roadway, to serve as permanent reminders of Watchung’s heritage for current and future generations to enjoy.
- Acquisition of properties or rights-of-way to establish a system of pedestrian walkways or trailways of varying length, difficulty and scenery. A fundamental concept to the Town Center plan is the pedestrian walkway system utilizing sidewalks. A community-wide trail

system could also be developed to provide opportunities for pedestrians, hikers, joggers, Scouts and nature groups. They may also provide opportunities to interconnect parks/recreation sites, open space areas, and community facilities.

- Acquisition of special historic or cultural sites or sites of special scenic value that should be protected to preserve or enhance the character of the community.
- Acquisition of sites that complement or provide linkage between existing open space areas, recreation areas, and community facilities or otherwise fulfills the goals of the Master Plan. Open space planning should remain flexible as opportunities may arise for the acquisition of sites that may bear an important relationship to the fulfillment of the Master Plan's goals and objectives.

What follows are the basic recommendations of the 2006 Watchung Borough Open Space and Recreation Plan. The recommendations are divided into different categories and utilize different strategies to address different needs of the community.

Acquisition Projects

1. **Ness Property** (Block 3.01, Lot 29) 19.8 acres

The 20 acres tract of farmland, formerly known as the Ness Farm located on Watchung Boulevard almost to the Warren Township border, was acquired by the Borough in 2006. The property has wooded areas, a stream and wetland. The property is currently zoned for affordable housing under the prior round housing plan. The tract over time has become the target of multiple Borough objectives, including affordable housing, open space, community center, library, etc. It is probable that the site will not be considered solely for open space purposes. Future plans could include playing fields, biking, hiking trails as well as other passive uses such as picnic tables. However, whatever development eventually occurs on the site, the Borough will be the controlling interest and should seek to retain as much open space as possible on the site, while accommodating other municipal goals.

2. **Stony Brook River Corridor Conservation Area** (Block 16.04 Lots 17.01, 17.02, 18, 19, 20.02, 20.03, 21; Block 46.02 Lots 1, 2) 16.86 acres

The lands along the Stony Brook from Borough Hall to the "triangle"

commercial area are proposed for open space and park use. The majority of the area has been acquired and is held in public ownership. The remaining properties not in public ownership are to be acquired so the entire area can be developed as a park with walking trails from the Village Center to the Borough boundary. The Open Space Committee will review past and future plans for walking trails throughout the park and develop a facilities improvement program with the County as part of the Somerset Street Improvements.

3. Vacant Parcels – Constrained/Critical Areas (Various Lots) 41.43 acres

The vacant land survey features numerous lots that have steep slope areas, wetlands, and floodplains. Each of these parcels is to be evaluated for the likelihood of future development, adjacency to existing open space and then prioritized for acquisition by the Borough or for protection by conservation easement either donated by the landowner or purchased by the Borough or other government agency or non-profit conservation group. Some lots (i.e., Block 70.08, Lots 2, 3, and 4) appear to be rear portion of parcels within other municipalities.

Open Space and Recreation Plan

Block	Lot	Location	Owner	Zone	Area (acres)
78.01	8	New Providence Rd	Cey,Inc.Acc Pay Dept 10,16,41	L-I	0.36
78.01	7	New Providence Rd	Cey,Inc.,Acctpay Dept. 10,16,41	L-I	1.36
70.08	4	Plainfield Avenue	Connell Rice & Sugar Co.,Inc. (159x160 Rear)	R-R	0.49
70.08	3	Plainfield Avenue	Aulisio, Constantine T. & Concetta (117x180 Rear)	R-R	0.63
70.08	2	Plainfield Ave	Lakatos, Peter & Shirley (130x185 Rear)	R-R	0.60
78.01	5	New Providence Rd	Brunswick Hot Mix Corporation	L-I	0.65
70.08	1.03	1041 Plainfield Ave.	Connell Rice & Sugar Co.Inc.	R-R	1.17
70.10	4.01	Drift Road	Beckerman, David M.	R-R	2.46
70.10	2	Drift Road	Berlant, Robert D	R-R	2.11
78.01	1	100 Union Ave.	Di Donato A & Di Donato C Trs	L-I	2.01
43.13	2	Cedar Lane	Free Acres Assoc.,Inc. % R. Holsten	R-R	11.15
64.02	2.04	Route 22	Watchung Vf Llc	L-I	2.60
60.01	3	Route 22	Watchung Vf Llc	L-I	5.15
58.01	3	Route 22	Watchung Vf Llc	L-I	3.19
44.09	4	Somerset St	Cronheim, Daniel & Mary Anne	B-A	5.61
44.09	3	936 Somerset St.	Cronheim, Daniel & Mary Anne	B-A	1.12
76.01	7	264 Bonnie Burn Rd	Brunswick Hot Mix Corp	B-A	0.77
Total Area					41.43

Open Space and Recreation Plan

4. Vacant Parcels - Pocket Parks (Various Lots) 10.04 acres

The vacant land survey features numerous lots that are present in exiting residential neighborhoods. Many of these parcels can be converted into small pocket parks for passive enjoyment. Each of these parcels is to be evaluated for the likelihood of future development, adjacency to existing open space and then prioritized for acquisition by the Borough. Priority will be given to parcels in neighborhoods that have the least amount of available open space.

Block	Lot	Location	Owner	Zone	Area (acres)
11.02	10	6 Deer Run	Sisto, John M. & Elizabeth (Pt Assd. Gr. Brook)	R-R	1.24
22.01	9.02	28 Rock Ave.	Cooper, Reginald & Mary B.	R-B	0.41
40.03	5.01	175 Park Place	Anisko, Joseph & Eugenia	R-A	1.41
43.06	3.02	54 Old Somerset Rd.	Reid, Andrew B. Estate Of	R-R	1.32
43.09	8	106 Old Somerset Rd	Reilly, George & Mahlstedt, Donna	R-R	0.85
54.02	10	448 Johnston Drive	Long, Henry	R-R	1.67
64.03	2.05				0.39
70.01	5	67 Price Drive	Fechtner, Dr. J. L. & Sondra	R-R	1.50
75.02	1	Valley Road	Connell Company	R-R	1.25
				Total	10.04

Open Space and Recreation Plan

5. Connell Property – (Block 75.01, Lot 1 through 7) 25.4 acres

The tract is currently owned by elements of the Connell Company. These tracts are the frontage lots in Watchung Borough for the Connell office complex located in Berkeley Heights Township. These tracts are currently zoned rural residential and are undeveloped, predominantly forested with areas of wetlands and floodplains. They are also opposite the quarry site and could provide additional acreage for an eventual park in the area. These properties are to be acquired for creation of a linear park system to be developed in conjunction with any open space areas created following redevelopment of the quarry.

6. Brook Hill Swim and Tennis Club – (Block 70.01, Lots 2, 3, 4.01, 4.02, 5.01, 5.02, 5.03 and 5.04; Block 43.13 Lot 2) 35.7 acres

The majority of the area is currently owned by Brook Hill Incorporated, while other properties are in separate ownership. This area houses the Brook Hill Swim and Tennis Club and adjacent vacant parcels. The area is currently zoned rural residential. The Borough can pursue public acquisition of the facility for the use and development of active recreation and the

adjacent isolated open space lots. The Borough may also want to consider a purchase of the property and then a lease back of the facility to the current owners for the operation of the facility for a set period of time, after which, ownership and operation would revert back to the Borough.

Easements and Agreements

7. Mt. St. Mary's

The Borough should consider pursuing acquisition of conservation easements on the remaining, undeveloped portions of the property. The majority of the remaining undeveloped areas include the properties behind BJ's Warehouse and the area adjacent to the utility ROW.

8. Trails

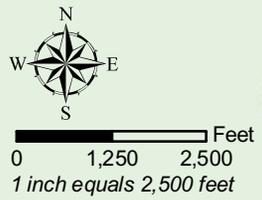
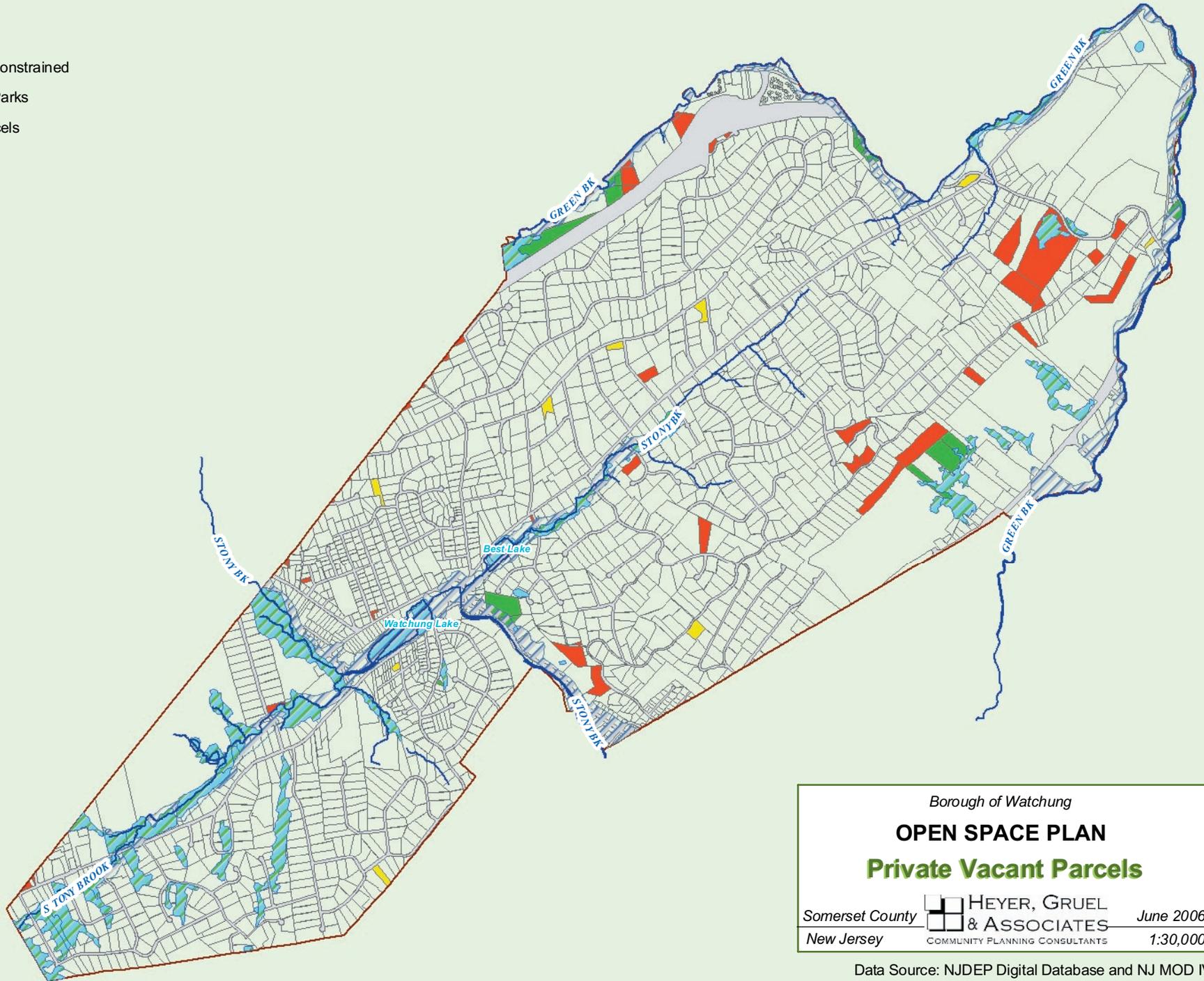
The previous Open Space Plan advocated recreating portions of the Old Somerset Trail that ran along the current course of Old Somerset Road. Other trail opportunities exist throughout the Borough including:

- Utility Right of Ways

Legend

Vacant Parcels

- Environmentally Constrained
- Potential Pocket Parks
- Other Vacant Parcels



Borough of Watchung
OPEN SPACE PLAN
Private Vacant Parcels

Somerset County	HEYER, GRUEL & ASSOCIATES	June 2006
New Jersey	COMMUNITY PLANNING CONSULTANTS	1:30,000

Data Source: NJDEP Digital Database and NJ MOD IV

- Camp Endeavor and the Bayberry School
- Anderson Road Open Space Area
- Spatford Park, Stony Brook Conservation Area, Village Center, Watchung Lake and Best Lake
- Phillips Field
- Connell Properties
- Upper Quarry Area

Each of these areas requires further study and planning. Possible routes and easement areas should be identified.

9. Entry Boulevards (Various Lots)

The previous open space plan (2000) placed emphasis on open space protection in gateway areas. "To a great extent, the gateway roads through the Borough define the character of the community and our visual environment. Ideally, the gateway roads should be tree-lined with large shade trees. Historic homesites should be preserved in their original settings, close to the roadway, to serve as permanent reminders of Watchung's heritage for current and future generations to enjoy." While all of these areas are not currently vacant properties, some of these

Open Space and Recreation Plan

areas may in fact offer opportunities for acquisition for historic preservation, shade tree plantings or revised zoning controls.

- a. Somerset Street from North Plainfield
- b. Mountain Boulevard from Warren
- c. Hillcrest Road from Warren
- d. Valley Road beyond the Quarry

Redevelopment

10. **Quarry Redevelopment** (Block 74.03 Lot 18; Block 76.01 Lots 3, 4, 5, 8, 9.01, 10, 11, 12.01, 12.02, 14, 15, 7, 18, 20, 21, 23, 24.01, 24.02, 25, 26, 27, 28, 29; Block 78.01 Lots 2, 4, 6) 197.13 acres

The 1999 Reexamination Report identified opportunity for a comprehensively planned mix of land uses in the quarry area, possibly consisting of a business conference center, offices, accessory retail uses and senior citizen housing, together with open space and recreation areas. It recommended that the Borough undertake a comprehensive planning study to identify appropriate and feasible redevelopment of the quarry area. After conclusion of the planning study, the 1999 Reexamination Report envisioned that the area

would be designated in the Master Plan and rezoned to a planned unit development (PUD) overlay zone with specified uses for future redevelopment and with the underlying zoning remaining. A map in the back of the 1999 Reexamination Report reflected the area recommended for such rezoning.

The Borough subsequently conducted a three-year study on the potential rezoning of the Weldon Quarry area. Phase 1 of the project involved the completion of a comprehensive report of the Quarry Study Area covering existing land uses, zoning, environmental conditions, utility infrastructure, traffic and planning goals and objectives. Phase 2 of the project involved an assessment of the developable areas and potential build-out within the quarry, including the preparation of a map displaying developable areas and a report prepared by the Borough's special engineering consultant. Phase 3 has thus far consisted of an amendment to the Master Plan (accomplished through a limited-scope Reexamination of the Master Plan in 2003) and the preparation of proposed zoning regulations for the quarry area.

Open Space and Recreation Plan

The current zoning ordinance should be revised to ensure significant open space areas, especially the areas at the top of the quarry that lie at current road grade, are dedicated for open space and recreation. There are significant acres of land in the upland portions of the quarry that can be rehabilitated and converted to woodlands, hiking trails, exercise trails and active recreation facilities. This site represents the last, large undeveloped set of properties in the Borough. While this plan recognizes the eventual redevelopment of the site for a business conference center, offices, accessory retail uses and senior citizen housing, it proposes to place all of the development on the site in the lower quarry area. The upper quarry area should be designated open space and recreation area, especially in light of the fact that this area can be combined with the Connell properties to create a larger park system that can be passive recreation and buffer area.

Existing Open Space**11. Phillips Field (Block 3.02, Lot 1) 30.5 acres**

The tract is located on Brookdale Road and is owned by the Watchung Board of Education and is the Borough's main active recreation facility. The park has several multiple use fields,

parking and field houses. At this time, it is the most likely area for additional recreational facilities; however, the site is constrained by wetlands and floodplain areas. Adequate on-site parking has been worked on. Issues raised in previous Open Space plans and Master Plans that may be addressed at Phillips field include:

- Adding additional baseball and softball fields
- Providing a new all purpose field for lacrosse, field hockey and soccer
- Replacing the pavilion at Phillips Field
- Creating a skate park
- Creating pedestrian and bike paths in and around Phillips Field

12. Camp Endeavor – (Block 69.08, Lot 22) 9.6 acres

The tract is located at 60 Sequoia Drive, was purchased by the Borough and is currently essentially undeveloped. Three tennis courts and a small parking area currently occupy the site. This plan envisions that more improvements can be accommodated on the site, including additional active recreation facilities and parking. Access is currently an issue on the site and road or other

improvements would be necessary to accommodate increased municipal use. The issues raised in previous Open Space Plans and Master Plans that may be addressed at Camp Endeavor include:

- Adding additional baseball and softball fields
- Providing a new all purpose field for lacrosse, field hockey and soccer
- Building of an all-purpose recreation center
- Creating a skate park

13. East Drive – (Block 57.01 Lot 6.01) 6.4 acres

The tract is located at the end of East Drive, is in municipal ownership and is essentially undeveloped. The site is severely constrained by steep slopes and has limitations for community/recreational development and street/parking. This plan envisions dedication of the property to permanent protected open space for critical areas protection.

14. Village Center/Somerset Street

A key component of the 1999 Master Plan Update was the

creation of a village center in the central portion of the Borough in the vicinity of the village circle where the five major residential connective roadways (i.e., Valley Road, Hillcrest Road, Somerset Street, Mountain Boulevard and Stirling Road) converge. This area also includes Watchung Lake, Best Lake, Borough Hall, and directly links to the Stony Brook. The Borough has made significant progress in the last six years to enhance the village center, including:

- Pedestrian Improvements around the Village Center. The Borough has improved pedestrian circulation and access in numerous locations in and around the village center including replacing old asphalt sidewalks with concrete ones, providing new sidewalks in numerous locations, making curbing improvements for pedestrian safety, and providing new pedestrian crosswalks in numerous locations.

Open Space and Recreation Plan

- Somerset Street Boulevard. Somerset Street is a major gateway into the Borough and leads visitors and residents into the village center. In order to enhance Somerset Street's position as a "gateway," the Borough has been working with Somerset County to convert Somerset Street into a landscaped boulevard with beautification and safety improvements. Part of the Borough's plan for Somerset Street, as well, are major sidewalk improvements along the Stony Brook side of the corridor that will provide pedestrian access to/from the "triangle" business and residential area, the village center and Spratford Park. The Borough has requested County assistance and funding for this initiative.

Implementation Plan Timetable

The Implementation Plan Timetable establishes the implementation agent as well as the general timeline for action on the following action strategies. These strategies are taken from the objectives outlined in this Plan.

The implementation agent identifies the general level of responsibility for implementing the strategy. The timetable is broken down into four levels:

- Short-term (6 to 18 months)
- Mid-term (18 months to 3 years)
- Long-term (within 5 years)
- Ongoing (a strategy that should continue on an ongoing basis).

Goal: To improve the quality of life of Watchung Borough residents

Action Strategy	Implementation Agent	Timeline
Ensure access to recreation facilities for all residents	County, Municipal, State	Ongoing
Ensure recreation facilities for all age groups	County, Municipal, State	Ongoing
Work toward goal of “ten minute walk to a park bench”	County, Municipal	Ongoing-until goal is met
Protect clean air and water through critical resource protection	County, Municipal, State	Ongoing
Identify new opportunities for small, local vest pocket parks throughout the County	County, Municipal	Ongoing

Open Space and Recreation Plan

Goal: To provide accessible recreation opportunities to all Watchung Borough residents

Action Strategy	Implementation Agent	Timeline
Address needs identified in recreation needs assessment	County, Municipal	Mid-term
Ensure completion of Watchung Borough Park and Recreation Plan recommendations for facilities improvements	County	Short-term
Increase funding priority for the maintenance and upgrading of facilities in County Parks and encourage the same in Municipal facilities	County, Municipal	Mid-term
Expand existing parks and encourage development of new parks where feasible	County, Municipal	Ongoing
Continue to react to public requests for new recreation facilities	County	Ongoing

Goal: To provide green spaces for public enjoyment in all Watchung Borough communities

Action Strategy	Implementation Agent	Timeline
Identify vacant parcels as possible green spaces	County, Municipal	Short-term
Identify existing publicly owned parcels as possible green spaces	County, Municipal	Short-term
Assess needs for landscaping and tree maintenance	County	Short-term
Provide incentives for private developments to include accessible green spaces	Municipal	Mid-term
Identify new opportunities for small, local vest pocket parks throughout the Borough	County, Municipal	Mid-term
Coordinate with local, adjacent counties, state and federal agencies to increase green spaces at public facilities	County	Short-term

Open Space and Recreation Plan

Goal: To actively acquire new Open Space lands where needed and feasible

Action Strategy	Implementation Agent	Timeline
Encourage municipalities to prepare inventories of publicly owned properties to consider the use of such properties for community facilities	County	Short-term
Create list of Borough acquisition priorities	Municipal	Short-term
Utilize the Open Space Trust Fund to begin acquisition activities	County	Ongoing

Goal: To protect areas of remaining critical resources, including Wetlands, Tidelands, Floodplains, Steep Slopes, Wildlife Habitat, and Surface Waters.

Action Strategy	Implementation Agent	Timeline
Identify remaining critical resources	Municipal	Short-term
Pursue acquisition of remaining critical resource areas	County, Municipal, State	Long-term
Pursue co-operative resource protection with Somerset and adjacent counties, the state, federal agencies and private non-profit conservation groups.	County, Municipal, State	Ongoing

Goal: To link proposed and existing recreation areas into an open space network

Action Strategy	Implementation Agent	Timeline
Provide for scenic walkways and bikeways in the Borough	Municipal, County	Mid-term
Provide way-finding signage to nearby parks and recreation facilities and on bikeways throughout the Borough	Municipal, County	Mid-term

Watchung

Open Space and Recreation Plan

Goal: To educate the citizens about existing and future Open Space and Recreation opportunities, and continue efforts to increase support for these activities

Action Strategy	Implementation Agent	Timeline
Produce pamphlet explaining key recommendations of this plan	County	Short-term
Put Watchung Borough Open Space and Recreation Plan on County's website/Municipal website	County, Municipal	Short-term
Partner with county, state and non-profit advocacy groups to advertise and cross promote existing recreation programs and activities and develop new programs	Municipal	Ongoing
Create new educational signage for existing and proposed recreation areas	Municipal	Mid-term
Create school programs to explain features of existing recreation programs and the benefits of physical fitness, as well as the benefits of Open Space and environmental protection	County	Mid-term to Long-term

NJDEP Green Acres Program Matching Grants Program

If a municipality has an approved source of open space funding and an approved Open Space and Recreation Plan, the Green Acres program, administered by the New Jersey Department of Environmental Protection, provides a larger match for land acquisition. The Planning Incentive Grant, for municipalities with an Open Space levy and an approved Open Space and Recreation Plan, provides a 50% matching grant. Urban Aid municipalities can receive a 75% matching grant. The balance of the funds can be provided as a loan at 2% for 30 years. If a municipality does not have an Open Space levy or approved Open Space and Recreation Plan, Green Acres only provides 25% of the acquisition cost.

Implementation Tool



Implementation Tool

Funding Resource Matrix

RESOURCES	PROGRAM DESCRIPTION	ADMINISTERED BY ELIGIBLE ENTITY	
Aid for Urban Environmental Concerns	The grant is designed to provide funding for the State’s urban communities to enhance the environment in the urban settings.	DEP-Office of Business & External Affairs	Municipalities and Counties classified as Urban
Emergency Grant and Loan Fund	Provides emergency funding for capital preservation projects for historic properties	DCA-New Jersey Historic Trust	County, Municipal, Non-profit
Environmental Education Grants Program	Provides financial support for projects that design, demonstrate, or disseminate environmental education practices, methods or techniques.	USEPA-Office of Environmental Education	
Garden State Historic Preservation Trust	Provides two categories of matching grants to encourage the careful preservation, preservation and rehabilitation of historic properties.	DCA-New Jersey Historic Trust	County, Municipal, Non-profit
Green Communities Challenge Grants	To help local government agencies implement urban and community forestry projects; projects are provided under four themes: Development, implementation, tree maintenance, and research projects	DEP- Community Forestry Program	Municipal and county governments
Land and Water Conservation Fund	Funds are used for state planning and for state and local acquisition and development of state and local facilities that provide active and/or passive recreation opportunities	USDOI-DOI/ National Park Service	

Implementation Tool

RESOURCES	PROGRAM DESCRIPTION	ADMINISTERED BY ELIGIBLE ENTITY	
Livable Communities	Creation of a strategic investment plan; Improvements that support transit or transit ridership for bus, train, light rail or ferry; Streetscapes, traffic calming and implementation of context sensitive design strategies; Bicycle or pedestrian facilities; Parking and circulation; Landscaping/ Beautification of transportation related facilities; Minor resurfacing and pavement rehabilitation associated with other activities as listed above but not to exceed 25% of the project cost	Department of Transportation- Local Government Services	Municipalities, counties
Municipal Aid Program- Bicycle Projects	Municipal aid given to support projects that result in either the creation of a new independent bicycle facility or in making an existing roadway bicycle compatible; competitive process; in four districts	Department of Transportation- Local Government Services	Municipalities
Municipal Aid Program- Pedestrian Projects	Municipal aid given in support of projects that will result in a safer environment for pedestrians	Department of Transportation- Local Government Services	Municipalities
Municipal and Non-profit Assistance Program	Grants to assist municipalities in acquiring properties of local priority as part of the Garden State Preservation Trust.	Planning	Municipalities
National Recreation Trails Program	To provide financial assistance for developing and maintaining trails and trail facilities; trails can be for non motorized, multi use and motorized purposes.	DEP- Natural Lands Management	Government and nonprofit land owners

Implementation Tool

RESOURCES	PROGRAM DESCRIPTION	ADMINISTERED BY ELIGIBLE ENTITY	
New Jersey Tree Planting Grant	To positively impact local areas by planting trees on land owned or controlled by state, county or local governments by supporting and encouraging the development of Community Forestry Programs.	DEP-Community Forestry Program	
NY-NJ Harbor Estuary Mini-Grant Program	Provides funding for projects that foster awareness of the goals of the NY/NJ Harbor Estuary Program and encourage involvement of the general public and local governments.	Counties in estuary, Non-profits	DEP-Division of Watershed Management
Open Space Program	Long and short term open space acquisitions	Planning	Municipalities
Preservation Easement Program	Offers permanent legal protection to wide range of historic properties.	DCA-New Jersey Historic Trust	County, Municipal, Non-profit
Recreation and Park Departments Assistance	Assists community recreation and park departments with the initiation, development, administration and management of recreational sites, resources and programming.	DCA-Housing and Community Development	Local government, recreation agency or citizen
Revolving Loan Fund	Provides financing for the preservation, improvement, restoration, rehabilitation and acquisition of historic properties and certain non-ancillary non-construction activities.	DCA-New Jersey Historic Trust	County, Municipal, Non-profit
Sustainable Development Challenge Grants	The USEPA solicits proposals for these grants that challenges communities to link environmental protection, economic prosperity, and community well-being	USEPA- SDCG Program	Municipalities, non-profit organizations

Appendix

Brownfields

Brownfields can be a mixed blessing. At best, they are an opportunity to turn blighted areas into community assets with much of the cost coming from state funds for brownfields reclamation. At worst, they are contaminated sites without sponsors that hamper efforts for redevelopment with open space or recreation components.

The NJDEP Site Remediation Program has an excellent website with information on Brownfields (<http://www.state.nj.us/dep/srp/brownfields/>). Much of the following information is from that website supported by Watchung Borough specific information.

A Brownfield is defined under NJ state law (N.J.S.A. 58:10B-23.d) as “any former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of a contaminant.” While this is the definition recognized in state legislation, there are many variations on this definition. Generally, brownfields are properties that are abandoned or underutilized because of either real or perceived contamination.

The NJDEP oversees some 23,000 contaminated sites. An estimated 10,000 of these are potential Brownfield sites. Many more potential brownfields that may exist in the State

are not yet before the Department for review. The NJDEP Known Contaminated Site List for 2001 listed 12 contaminated sites in Watchung Borough. Following the statewide estimate, those 12 sites could produce about 5 to 6 Brownfield sites appropriate for redevelopment or recreation development in Watchung Borough.

NJDEP launched the “Brownfields to Greenfields” initiative in November 2002. That initiative encourages the restoration of Brownfield sites into recreational or natural areas. If a municipality, county or partnership wants to turn a Brownfield into a Greenfield; experienced NJDEP case managers can oversee remediation and revitalization efforts to help the locality comply with the Technical Requirements for Site Remediation. Assurance that the public is protected from any exposure is a key concern addressed by long term monitoring and maintenance of engineering and institutional controls when required. Funding for remediation and acquisition may be available from other parts of NJDEP, such as the Green Acres Program.

The NJDEP works with the NJ Economic Development Authority (EDA) in the implementation of the Hazardous Discharge Site Remediation Fund (HDSRF). The legislature created the HDSRF in 1993 to provide loans and grants to municipal governmental entities, the New Jersey Redevelopment Authority (NJRA), and private parties. HDSRF funding is devoted to remediating discharges of hazardous substances. Over the past ten years the HDSRF

provided over \$100,000,000 for remediation of over 1,000 sites. Municipalities may apply for grants and loans up to \$2 million per year for investigation and cleanup activities from the Hazardous Discharge Site Remediation Fund.

The New Jersey Economic Development Authority (EDA) plays a key role in financing these grants and loans, working with DEP to cover eligible costs and provide loan servicing. Grants are specifically provided to municipalities for a preliminary assessment (PA) and site investigation (SI) when a municipality holds the tax sales certificate or has foreclosed or has voluntarily acquired a property for redevelopment. Municipalities may obtain money to proceed with the remedial investigation (RI) if they own the property. If after conducting the PA/SI/RI a municipality wants to conduct the cleanup, low interest loans are available.

Watchung Borough could benefit greatly from this program by identifying contaminated sites, notifying NJDEP case managers and coming up with a plan for remediation. Often, sites can be cleaned and capped, and new surfacing for recreation areas can effectively “seal” the area. Recreation uses are also desirable for brownfields because one of the main concerns over re-use of sites is exposure. Recreation uses are almost by definition short-term exposures, a couple of hours at most for any activity. Whereas residential development on re-use sites is more problematic due to prolonged exposure times on remediated sites.

Existing Brownfields and Landfills

Brownfields and landfills, polluted by former or ongoing uses, hold the potential for recreational open spaces. The 2005 NJDEP Known Contaminated Site List for the Borough of Watchung contains 14 brownfield sites. These identified sites have been classified here into five categories:

Category	Number of sites
1. Known Contaminated Sites noted by NJDEP in 2005	14
2. Air Facility Subsystem, NJ	4
3. Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) or Superfund for the United States	6
4. Resource Conservation and Recovery Act, NJ	8
5. Permit and Compliance System, NJ	3

Several state and federal statutes regulate these sites, and a site can be regulated under more than one statute at the same time. The statutes are:

State

- Brownfield and Contaminated Site Remediation Act
- Industrial Site Recovery Act
- Solid Waste Management Act
- Spill Compensation & Control Act
- Underground Storage of Hazardous Substances Act
- Water Pollution Control Act

Federal

- Comprehensive Environmental Response, Compensation and Liability Act
- Superfund Amendments and Reauthorization Act
- Resource Conservation and Recovery Act Corrective Action Program

New Jersey NJDEP Known Contaminated Sites List

The KCS-NJ report is a list of sites where contamination of soil and/or ground water is confirmed at levels greater than applicable cleanup criteria or environmental standards. The data included in the KCS-NJ report is as of April 1, 2005. The KCS-NJ report is produced by the New Jersey Department of Environmental Protection (NJDEP) Site Remediation and Waste Management Program (SRWM) in response to state law

N.J.S.A. 58:10-23.16-17, which requires the SRWM to prepare a list of sites that have been contaminated by hazardous substances. The report also satisfies obligations under the New Jersey New Residential Construction Off-Site Conditions Disclosure Act (N.J.S.A 46:3C1 et seq.).

Sites included in the KCS-NJ report can undergo a wide variety of remedial activities, ranging from relatively simple “cut and scrape” cleanups to highly complex cleanups. The sites with complex contamination issues can have several sources of contamination, which can affect both soil and groundwater at the same time. Several groups or remedial bureaus within the SRWM Program manage these cleanups. It is possible for more than one bureau to be involved at one site at the same time. A site being regulated under more than one statute or regulation often drives this scenario. However, this report lists only the main contact bureau for the site. The link available within this web site, entitled “What Contact Bureaus Do,” explains what types of sites each bureau manages and lists phone numbers for each bureau. For further information contact NJDEP’s Site Remediation Program and Waste Management (SRWM) lead program, which are identified with each site listed in this database. Contact information for SRWM’s lead program can be acquired at <http://www.state.nj.us/dep/srp>.

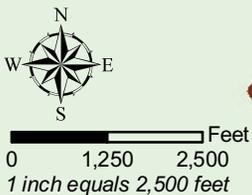
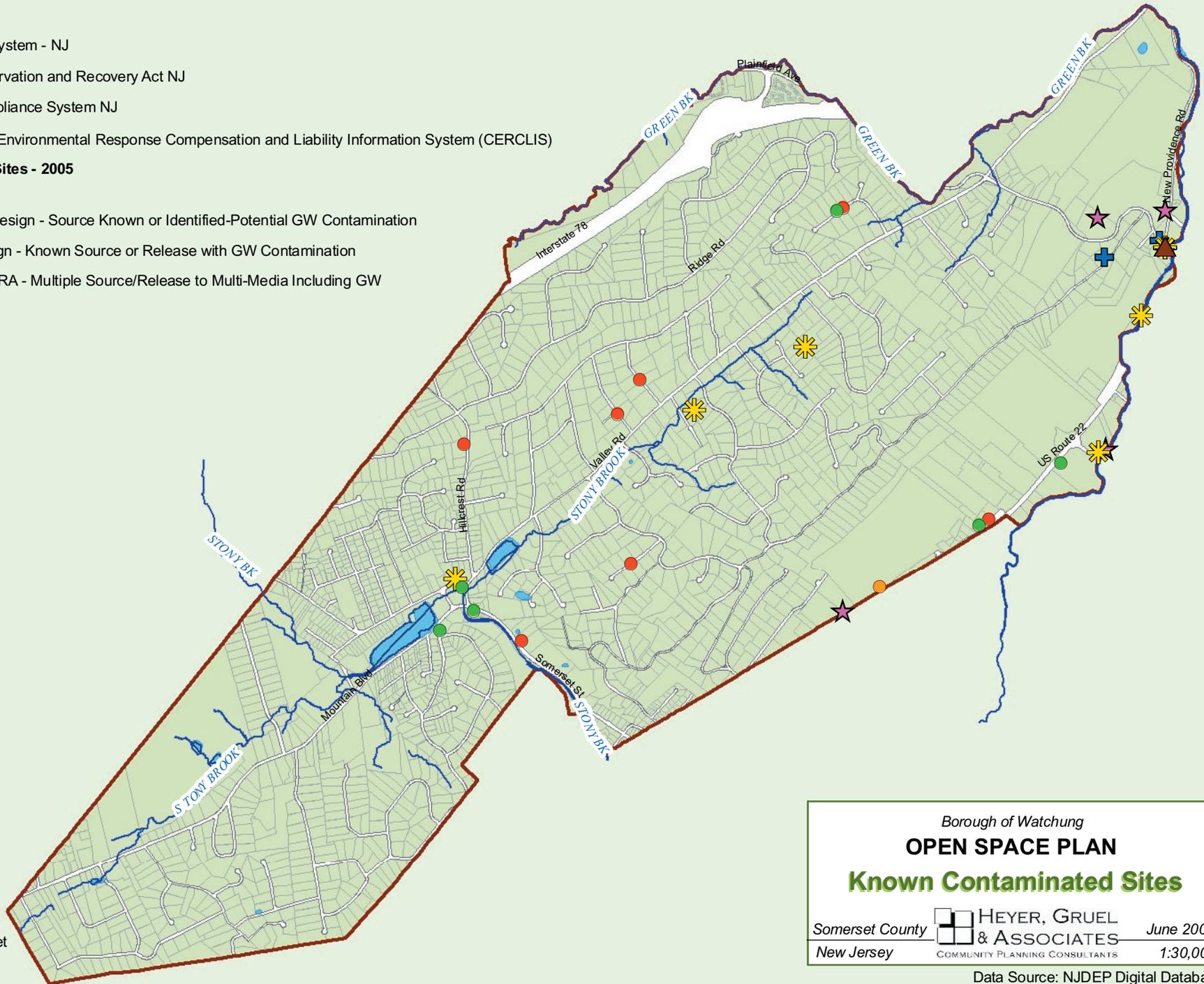
Legend

-  Air Facility Subsystem - NJ
-  Resource Conservation and Recovery Act NJ
-  Permit and Compliance System NJ
-  Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS)

Known Contaminated Sites - 2005

Remedial Levels

-  C1: No Formal Design - Source Known or Identified-Potential GW Contamination
-  C2: Formal Design - Known Source or Release with GW Contamination
-  D: Multi-Phased RA - Multiple Source/Release to Multi-Media Including GW



Borough of Watchung
OPEN SPACE PLAN
Known Contaminated Sites

Somerset County  HEYER, GRUEL & ASSOCIATES June 2006
 New Jersey COMMUNITY PLANNING CONSULTANTS 1:30,000

Data Source: NJDEP Digital Database

The Watchung Square Mall, at 1501 Route 22, is a former brownfield site of Lockheed Electronics Company Inc. The source of contamination was known or identified with potential groundwater contamination. This site is included in the 2005 NJDEP Known Contaminated Sites List from the Interim list with a status date of August 2003.

Bureau of Southern Case Management (formerly BUST) primarily oversees environmental cleanups at sites subject to the Underground Storage of Hazardous Substances Act where remediation may involve soil and/or ground water. Sites under this program are also subject to the state's Brownfield and Contaminated Site Remediation Act, the Spill Compensation and Control Act, the Solid Waste Management Act and the Water Pollution Control Act.

Name	Address	Remedy Status
BP Service Station 4260	15 Stirling Rd	C2
Getty Service Station 56873	989 Somerset St	C2
Mobil Service Station 57242	1555 Rte 22	C2
Sears Roebuck & Company #1294	1640 Rte 22	C2
Westor Gas Inc.	900 Somerset St	C1
Watchung Chemical Engine Co.	56 Mountain Blvd	C2

Remedy Status Key: C1- No formal Design, Source known or identified potential groundwater contamination; C2 - Formal design, Known source or release with groundwater contamination.

Bureau of Field Operations - Northern is responsible for overseeing the remediation of sites located in Bergen, Essex, Hudson, Hunterdon, Morris, Passaic, Somerset, Sussex, Warren and Union counties. The types of cleanups handled by BFO-N are considered moderate in remedial complexity, ranging from the remediation of a single source of contamination to several sources. The cleanup may include ground water contamination. Remediation are conducted, by responsible parties, under the state’s Brownfield and Contaminated Site Remediation Act, the Spill Compensation and Control Act, the Solid Waste Management Act, the Water Pollution Control Act, the Industrial Site Recovery Act and the Underground Storage of Hazardous Substances Act.

The H. Texier Glove Company Glove Company, at 1565 Rte 22, was a contaminated site with multiple sources and release to multi-media, including groundwater. JV Motorsports is located on this site.

Name	Address	Remedy Status
116 Vail Lane	116 Vail Lane	C1
213 Hillcrest Road	213 Hillcrest Road	C1
52 Redmont Rd	52 Redmont Rd	C1
78 Vail Lane	78 Vail Lane	C2
88 Century Lane	88 Century Lane	C1
55 Will Lane	55 Will Lane	C1

Remedy Status Key: C1- No formal Design, Source known or identified potential groundwater contamination; C2 - Formal design, Known source or release with groundwater contamination.

Air Facility Subsystem, NJ

The system contains the locations of stationary sources of air pollution that are regulated by the U. S. EPA, state and local air pollution agencies based on Aerometric Information Retrieval System - Air Facility Subsystem (AIRS/AFS) maintained by the US EPA. This information is to prepare State Implementation Plans (SIPs), to track the compliance status of point sources with various regulatory programs, and report emissions estimates for pollutants regulated under the Clean Air Act.

Name	Address
Weldon Concrete Corp	New Providence Rd
Fanwood Crushed Stone Co	1 New Providence Rd
Weldon Asphalt Co Plant #2	New Providence Rd
Weldon Materials	New Providence Rd

Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) or Superfund for the United States

The CERCLIS Database is the Comprehensive Environmental Response, Compensation and Liability Information System that contains information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation.

NAME	ADDRESS
Fanwood Crushed Stone Company	New Providence Road
Colorado Cafe WTP	154 Bonnie Burn Road
Lockheed Electronics Co (now Watchung Square Mall)	1501 Us Route 22
Sears Facility #1294	1640 Route 22
Sears Retail Facility #1294	1640 Route 22
Sears Roebuck And Co Unit 1294	1640 Route 22

Resource Conservation and Recovery Act, NJ

RCRA regulates the management of solid waste (e.g., garbage), hazardous waste, and underground storage tanks holding petroleum products or certain chemicals.

NAME	ADDRESS
Patrick J Grant And Kathleen M Skinner	55 Friar Lane
Amoco Service Station 4260	15 Stirling Rd
Ober Virginia Private House	469 Valley Rd
Weldon Concrete Co	New Providence Rd Garage 1
Fanwood Crushed Stone Co	New Providence Rd
Blue Star Cleaners	Route 22 W
Weldon Asphalt	1 New Providence Rd
Tx Eastern P L-Sears Rte 22 Mlv Ln 20-B	Rte 22

Permit and Compliance System, NJ.

The Permit and Compliance System (PCS) contains data on the National Pollution Discharge Elimination Systems (NPDES) permit-holding facilities. PCS contains information on the permitted facility, compliance schedule, outfall schedule, permit limits, discharge monitoring reports, enforcement actions and violations. The PCS data layer was developed from EPA's PCS and Locational Data Implementation Plan (LDIP) databases.

NAME	ADDRESS
Weldon Asphalt Co.	New Providence Road
Fanwood Crushed Stone Company	New Providence Road
Colorado Cafe Wtp	154 Bonnie Burn Road

Brownfields Resources

RESOURCE	PROGRAM DESCRIPTION	ADMINISTERED BY
Brownfield Redevelopment Loan Program	Interim financing provided to eligible borrowers for meeting the costs of the remediation of a brownfield site.	NJEDA-Brownfields Redevelopment Office
Brownfields Assessment Demonstration	This program is designed to empower states, communities, and other stakeholders in economic redevelopment to work together to prevent, assess, safely cleanup, and sustainable reuse brownfields.	USEPA-Superfund Hotline (800) 424-9346
Brownfields Cleanup Revolving Loan Fund	This initiative is designed to empower states, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely clean up, and sustainable reuse brownfields.	USEPA-Special Projects
Brownfields Economic Development Initiative (BEDI)	Provides funding for redeveloping brownfield sites providing it is used in conjunction with a Section 108 Loan Guarantee.	US HUD
Brownfields Incentive for Industrial Site Cleanup	To facilitate redevelopment agreements between developers and the Secretary of Commerce where up to 75% of the cost of remediation can be recovered by the developer of a "Brownfield" site once the project has begun to realize new state tax revenue sufficient to cover the cost of remediation. The developer must be the nonresponsible party and agree to undertake and clean up the site to the satisfaction of the NJDEP, and the project must be an integral part of a local redevelopment strategy.	NJ Commerce & Economic Growth Commission
Brownfields Redevelopment	This program offers information on the various incentives for brownfields redevelopment and coordinates projects among appropriate State agencies for the expeditious reuse of these sites.	DCA-Office of Smart Growth

RESOURCE	PROGRAM DESCRIPTION	ADMINISTERED BY
Federal Empowerment Zone and Enterprise Community Program	Benefits that include Brownfields Tax Incentives to clean up and redevelop contaminated industrial site; relaxed eligibility for bonds.	US HUD- Empowerment Zone Program
Hazardous Discharge Site Remediation Loan and Grant program	The EDA works in conjunction with the DEP to assist companies involved in hazardous discharge site investigation and cleanup with loans of up to \$1 million for as long as 10 years through the Hazardous Discharge Site Remediation Fund. Municipalities may apply for grants and loans up to \$2 million per year. Eligible entities include: industrial businesses that do not have the ability to get funding on their own and are required to perform a cleanup due to closing or transferring ownership of operations; persons who do not have the ability to get funding on their own and have discharged and are responsible for a hazardous substance; and municipalities and persons who voluntarily agree to clean up a site.	NJEDA-Commercial Lending Division
New Jersey Urban Site Acquisition Program	Financial assistance to acquire vacant, abandoned properties that are part of a larger comprehensive urban redevelopment effort. The program will identify state and other funding sources for site preparation, construction and all other aspects of redevelopment.	DCA-NJRA
USEPA Brownfields Demonstration Pilot program	Up to \$200,000 grants to municipalities for site identification, site assessment, site characteristics and site remediation, planning and design for areas that have an actual or threatened release of a hazardous substance or contaminant.	USEPA Region 2; Brownfields Assessment
Petroleum Underground Storage Tank Remediation	Loans and hardship grants for remediation of all or a portion of the costs associated with the upgrade, and/or closure of tanks. Homeowners may qualify for assistance from the program for leaky oil tanks.	NJEDA-Commercial Lending Division

RESOURCE	PROGRAM DESCRIPTION	ADMINISTERED BY
Smart Growth Pre-development Funding	For developers undertaking commercial, industrial, office and mixed use projects in urban and developed suburban and rural communities. Projects must have municipal support and be part of a local redevelopment plan. Short-term financing will be arranged for pre-development site preparation costs (non-contamination related) including, but not limited to, land assemblage, demolition, removal of materials and debris, and engineering costs.	NJEDA-Brownfields Redevelopment Office
Superfund Technical Assistance Grants	This program provides funds to community groups so they can hire technical advisors who assist the groups in interpreting technical information concerning the assessment of potential hazards and selection and design of appropriate remedies at sites eligible for cleanup under the Superfund Program. Funds can be used at sites listed or proposed for the National Priorities List (NPL) where cleanup is under way.	USEPA – Office of Emergency Response
Technical Assistance to Brownfields	Provides technical assistance and outreach through an outreach services for communities program (TOSC) to redevelop brownfield sites.	USEPA
Underground Storage Tank Remediation, Upgrade and Closure Fund	To provide financial assistance via grants and loans to close, upgrade or remediate discharges from underground storage tanks. The fund provides for low-interest loans and grants to all eligible applicants, with the exception of public entities and non-profit businesses.	DEP - Responsible Party Site Remediation

**RESOLUTION NO. PB 06-R12
ACCEPTING OPEN SPACE AND RECREATION PLAN
AS AN AMENDMENT TO THE BOROUGH MASTER PLAN**

WHEREAS, the Municipal Land Use Law, N.J.S.A. 55D-22 sets forth the intent and purposes of the Municipal Land Use Act and;

WHEREAS, one of the expressed purposes of the Act is to encourage municipal action to guide the appropriate use or development of all lands in this state and to provide for adequate open space; and

WHEREAS, the MLUL also directs that municipalities provide sufficient space in designated locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey Citizens; and

WHEREAS, the MLUL directs that municipalities promote the conservation of historic sites and districts, open space, energy resources and valuable natural resources in the State and prevent urban sprawl and degradation of the environment through improper use of land; and

WHEREAS, the MLUL provides for the adoption of a Master Plan and for the periodic re-examination of the same at least once every six years from the previous re-examination; and

WHEREAS, the Planning Board for the Borough of Watchung has previously adopted an Open Space and Recreation Plan consistent with the provisions of the Master Plan; and

WHEREAS, members of the Open Space Committee, the Environmental Commission, the Historic Committee, Mayor Ellis and Members of ANJEC were present at a special meeting conducted by the Planning Board for the Borough of Watchung on June 27, 2006; and

WHEREAS, Paul Gleitz, a Professional Planner in the employ of Heyer, Gruel and Associates, Borough Planners, served as a consultant to the Open Space Committee and provided an overview of the findings of the same on June 27, 2006; and

WHEREAS, the Borough of Watchung Open Space and Recreation Plan has been found by the Planning Board to be a well organized program intended to identify, prioritize, enhance and preserve critical open space within the Borough consistent with the provisions of the Municipal Land Use Law; and

WHEREAS, the Planning Board has determined that it is in the interest of the Borough of Watchung to adopt the Open Space and Recreation Plan subject to certain corrections and amendments therein.

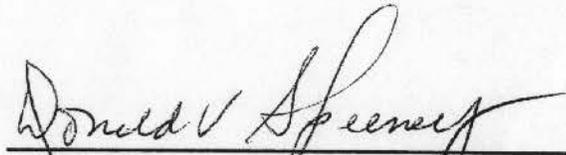
NOW, THEREFORE, BE IT RESOLVED, by the Planning Board for the Borough of Watchung finds that the Open Space and Recreation Plan prepared by Heyer, Gruel and Associates as

presented in an open forum before the Planning Board on the 27th day of June, 2006 BE and the same is hereby **APPROVED** as an amendment to the Master Plan subject to certain changes therein as are set forth in detail upon the minutes of the Borough of Watchung Planning Board for the Special Meeting dated June 27, 2006.

BE IT FURTHER RESOLVED, that upon presentation of a revised Open Space and Recreation Plan consistent with the recommendations of the Planning Board a certified true copy of the same be forwarded to the Mayor and Council for the Borough of Watchung and the Somerset County Planning Board for review as an amendment to the Borough Master Plan, reserving those areas therein designated as Open Space.



PETER HAVAS, Secretary

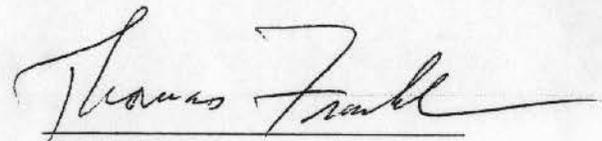


DONALD V. SPEENEY, CHAIRMAN

Dated: July 18, 2006

RESOLUTION

BE IT HEREBY RESOLVED, by the Mayor and Council of the Borough of Watchung, to formally endorse and support the Planning Board's adoption of the Open Space and Recreation Plan, as an amendment to the Master Plan.


Council


Mayor

Date: August 17, 2006

INDEX: Planning Board

c: D. Speeney 8/18/06

BOROUGH OF WATCHUNG



August 18, 2006

Mr. Paul Gleitz
Heyer, Gruel & Associates
63 Church Street
New Brunswick, New Jersey 08901

Dear Mr. Gleitz:

On June 26, 2006 the Environmental Commission passed a resolution recommending that the Planning Board adopt the Open Space and Recreation Plan that was prepared by you and others in your firm for inclusion in the Borough's Master Plan. Our recommendation was passed on to the Planning Board for their June 27th special meeting.

We all had the opportunity to participate in reviewing the scope of the work and the final drafts and appreciate what was accomplished. Thank you for your outstanding work and making the work of the Project Team go so smoothly.

Sincerely yours,

A handwritten signature in cursive script that reads "Dolores Kresge". The signature is written in dark ink and is positioned above the typed name.

Dolores Kresge, Chair
Environmental Commission