

CONSERVATION & COMMUNITY FACILITIES PLAN ELEMENT

INTRODUCTION

The purpose of this element of the Master Plan is to provide a comprehensive overview of the community facilities that are present within Highlands Borough. Community facilities include government buildings, educational facilities, cultural facilities, hospitals, fire houses, police stations, and libraries. They provide opportunities for recreation, health, safety, education, and cultural enrichment. Ideally, a community facility should be adequate in size, appropriately located within the community, and responsive to meeting the needs of the residents of Highlands.

The Municipal Land Use Law (MLUL) indicates that a Community Facilities Plan Element is an optional element of a municipal master plan. In Section 40:55D-28 of the MLUL, the requirements of a Community Facilities Plan Element is indicated. These include indicating the existing and proposed locations and types of educational or cultural facilities, historic sites, libraries, hospitals, firehouses, police stations and other related facilities, including their relation to the surrounding areas.

In addition to identifying the facilities in the Borough, this element of the Master Plan seeks to demonstrate the capacity of these facilities to meet the current and future needs of the Borough. This will better prepare the Borough to plan and make capital or operational improvements to the specified facilities.

INVENTORY OF COMMUNITY FACILITIES

Municipal Building Complex

The Highlands Borough Municipal building is located at 171 Bay Avenue. Departments housed in the main building include Administration, the Municipal Clerk, Treasurer, Tax Assessor/Collector, Department of Public Works, Planning & Zoning, Construction Office, Police Department and Municipal Court.

FIGURE CF-1
COMMUNITY FACILITIES MAP



KEY	
	Community Facilities

COMMUNITY FACILITIES MAP
Highlands Borough, Monmouth County, New Jersey
Figure CF-1

TM
ASSOCIATES

1"=1000' October 2004

The 1992 Master Plan identified the desire to expand the municipal complex. This proposal called for constructing a new municipal building and police department on South Second Street near Spring Street. The existing municipal building was earmarked for redevelopment into a mixed commercial use. With the exception of constructing a new surface parking lot, the plans identified in the 1992 Master Plan to relocate the municipal building were never fully implemented.

At this time, the Borough has reevaluated the need to construct a new municipal building. Current plans call for constructing a stand alone building to house the Fire Department. Vacant space associated with the departing Fire Department staff may be sufficient to accommodate municipal building expansion requirements.

Public Works

The Public Works Department owns one property within Highlands Borough. The 1.69 acre site contains the Borough's heavy equipment and is primarily used for the storage of that equipment. The Department owns a number of vehicles that are used throughout the Borough.

At this time, the public works department has not indicated the need for additional facilities.

Municipal Court

The Municipal Court Building houses one full-time Administrator, and both a judge and prosecutor for court dates two times a month. The municipal courtroom is housed within the Municipal Building and is approximately 800 square feet. There is no need for expansion of this facility.

Water and Sewer

The Water and Sewer offices are not located within the Municipal Building. Rather, one private company, the New Jersey American Water Company, provides water service. The Township of Middletown Sewerage Authority (TOMSA) provides sewer service. Their facilities are discussed further in the Utilities component of the Master Plan.

**TABLE CF-1
 COMMUNITY FACILITIES &
 PARK, RECREATION AND OPEN SPACE**

BLOCK	LOT(s)	LOCATION	NAME	ACREAGE
SCHOOLS				
13	1	One Grand Tour	Henry Hudson Regional	8.73
17	1			
18	1			
116	1	Linden Avenue/Route 36	Highlands Elementary	6.55
RESCUE/FIRE				
40.01	21	Shore Drive	Future Fire Station	0.16
59	10	Bay Avenue	Highlands Fire Department	N/A
64	5	Valley Street	Public First Aid Squad	0.16
MUNICIPAL UTILITIES AUTHORITY				
40	8.01	Shore Drive	Water Treatment Plant	
RECREATION/OPEN SPACE				
N/A	N/A	Marine Place	Marine Place Bulkhead Fishing Area	N/A
N/A	N/A	Route 36 Bridge	WWI Monument	N/A
8	2	Hillside Avenue/South Bay Avenue	South Bay Avenue Beach	0.5
14	1, 1.01	Grand Tour	Open Space	8.32
38	9	Route 36/Bay Avenue Interchange	Ederle Park	0.06
39	1, 1.01, 2-7, 3.01, 4.01 and 5.01	Bay Avenue	Veterans Park	2.5
40	17.01	North Street	Frank Hall Park	0.29
53	1	Miller Street	Public Park	0.38
56	10, 10.01 ¹	Miller Street	Miller Street Beach	0.43 (not including riparian grant)
60	17.01	Miller Street and Route 36	Monument/Flag pole	0.07
95	1	Bay/Water Witch Avenues	Huddy Park	0.46
97	1.01 ⁷	Snug Harbor Avenue	Water Witch Beach	0.43
PUBLIC WORKS				
40.01	22.01	Shore Drive	Public Works Yard	1.69
COMMUNITY CENTERS				
41	10	Bay Avenue	American Legion	0.14
96	1	Bay Avenue/Water Witch Avenue	VFW Building	0.27
97	1	Bay Avenue/Snug Harbor Avenue		2.3
Municipal Government/Post Office				
58	24	Bay Avenue	US Post Office	0.25
59	3,5,6,10	Bay Avenue		0.64

⁷ Riparian Grant

Fire Department

There is one Fire Department Station within Highlands that provides fire protection services for the Borough. The Station shown on the Community Facilities Map (CF-1) is located at the Borough's municipal complex. The Fire Department provides full service to the community on a volunteer basis.

The Fire Department responds to approximately 80 to 100 calls a year and is awaiting the construction of a new firehouse at the corner of Miller Street and Shore Drive. Currently the organizational structure of the Fire Department consists of:

- A Chief
- A First Assistant Chief
- A total of (5) Captains and Lieutenants.
- A Secretary
- A Chaplain
- Volunteer members

The station contains two bays.

Public Schools

Highlands Borough Elementary School

Highlands Borough currently has one Borough Elementary School, which is located at 360 Navesink Avenue. The school provides education for children from pre-kindergarten to Grade 6 for the entire district. The 2002-2003 budget for the school equals \$3,606,256 and an anticipated per pupil cost of \$11,009.

The school has a current enrollment of 246 students as of March 5, 2003. Table CF-3 indicates that from 1995 to 2000, the number of school children enrolled varied from 222 to 288 students. The Division of Education, in their long-range facility plan, anticipates an enrollment of 277 persons. As the school is operating below capacity, there are no short-term plans for expansion.

The Highlands Elementary school encourages the joint use of the school for recreation, community meetings, and other functions.

**TABLE CF-2
 PRE-KINDERGARTEN TO GRADE 6
 2003 SCHOOL ENROLLMENT
 HIGHLANDS BOROUGH, NEW JERSEY**

School Enrollment	Students
AM Pre-Kindergarten	4
PM Kindergarten	15
Kindergarten	28
Grade 1	36
Grade 2	23
Grade 3	27
Grade 4	30
Grade 5	31
Grade 6	28
Learning Disability 1	10
Learning Disability 2	10
Out of District Special Education	4
Total	246

**TABLE CF-3
 GRADES KINDERGARTEN TO 6
 HISTORICAL ENROLLMENT DATA
 HIGHLANDS BOROUGH, NEW JERSEY**

Historical Data					
GRADE	95- 96	96-97	97-98	98-99	99-00
K	37	36	41	46	34
1	36	39	37	43	41
2	26	38	42	36	38
3	25	26	27	40	32
4	26	20	28	29	39
5	23	29	17	30	34
6	27	23	28	19	31
SPL ED	22	24	32	37	39
TOTAL	222	235	252	280	288

Source: Henry Hudson Regional High School District Demographic Study - November 6, 2000

Henry Hudson Regional High School

Junior High and High School students (grades 7-12) from Highlands are sent to Henry Hudson Regional School. The school is located at One Grand Tour in Highlands on a 28.17 acre site. The school provides education for youth from grades 7-12 for the Borough of Highlands and Atlantic Highlands. The 2002-2003 district budget for the school is \$7,019,961.00. The school has a capacity of 436 students and the current enrollment is approximately 452⁸ persons.

There are a total of 32 classrooms comprising 69,000 square feet within the school used for teaching and learning. The average class size is 23 students.

**TABLE CF-4
 GRADES 7 TO 12
 ENROLLMENT PROJECTIONS
 HIGHLANDS BOROUGH, NEW JERSEY**

Historical Data						Enrollment Projections				
GRADE	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05
7	67	58	68	63	71	77	72	92	70	81
8	80	64	50	57	62	65	70	66	84	63
SPL ED	0	2	6	31	31	31	31	31	31	31
Subtotal	14	12	124	151	16	17	17	18	18	17
	7	4			4	3	3	9	5	5
9	68	81	66	42	56	60	62	67	64	81
10	61	56	83	55	43	52	56	58	62	59
11	55	60	49	60	49	37	45	48	50	54
12	57	56	54	42	52	45	34	41	44	46
SPL ED	0	5	12	61	60	60	60	60	60	60
Subtotal	24	25	264	260	26	25	25	27	28	30
	1	8			0	4	7	5	0	0
TOTAL	388	382	388	411	424	427	430	464	465	475

Source: Henry Hudson Regional High School District Demographic Study - November 6, 2000

In order to satisfy enrollment projects and school facility requirements, a referendum was passed on September 24, 2002 for \$14,600,000 dollars for improvements including:

New Construction

- 26,200 square foot addition
- 2 science labs w/ shared Prep room
- 1 science Demo room
- 4 S.G.I. rooms
- 1 in-school suspension room

⁸ Hudson Regional School District

- Cafetorium w/stage
- Serving kitchen
- Faculty dining
- Mechanical and storage spaces
- Toilet rooms and circulation

Rehabilitation

- Conversion of 4 classrooms to special education rooms
- Conversion of Media Center
- Conversion of biology demo, chem./physics and science demo to 4 classrooms
- Conversion of music practice rooms to music suite
- Conversion of storage space to faculty room and elevator
- Remove VAT flooring and replace ceiling panels
- Replace gas fired water heater
- Replace gas service
- Replace unit ventilators in classrooms
- Replace temperature controls system
- Upgrade building services and transformer
- Replace light fixtures
- Install additional site lighting
- Upgrade branch panels
- Upgrade electrical system to accommodate the new boiler
- Replace intercom and PA systems
- Upgrade security system
- Upgrade technology data drops
- Replace fire alarm system
- Replace clock system
- Replace telephone system
- Provide new gas generator
- Provide new casework at new unit ventilators
- Upgrade toilets for ADA compatibility
- Replace concrete sidewalks
- Address code related fire issues
- Replace fire extinguishers
- Replace boiler.

The local share of the project costs is \$10,340,709 (60%) and the State's share is \$4,259,291 (40%).

CONSERVATION

This Conservation Plan examines impacts to the natural environment and investigates methods to improve the natural environment.

Highlands is a fully developed community, however, unlike many developed communities, Highlands has numerous conservation opportunities. This Conservation Plan Element strives to protect the resources which make Highlands a community of place - its cliffs, the Shrewsbury River, and the Sandy Hook Bay.

ENVIRONMENTAL RESOURCES

Steep Slopes

Impacts of disturbing steep slopes are well documented in planning literature. In Highlands and the immediate surrounding communities, the largest cliffs along a waterfront from New Jersey to Texas exist. This unique landform requires special attention. In these steep slope areas, existing and altered drainage patterns and the amount and speed of runoff can cause erosion, soil creep, slump blocks (sections of soil shifting down and outward on the slope), and landslides. By changing the existing topography through grading the foot of a slope or cutting into the face of a hillside, instability and erosion occur. Typically, soils on ridgelines and steep slopes are already thin and susceptible to wind and water erosion, which warrants engineering review for all development.

In Highlands, during a rainfall, a large amount stormwater runs off the cliffs onto the low lying areas and is documented as a stormwater problem within the Utility Plan Element. This problem can only worsen as slopes and immediate areas surrounding slopes are covered with impervious surfaces, such as roads, driveways and buildings. Since water can't percolate into the soil, it runs off down the cliff, picking up speed as it travels across these smoother surfaces. If not collected, the silt from the eroding surrounding soils will run off into the Sandy Hook Bay and Shrewsbury River.

Highlands is fortunate to have a steep slope ordinance to protect future disturbance of steep slopes. However, due to the uniqueness of this environment, the Borough should continually monitor the stability of these steep slope areas and means of preserving existing water quality, in addition to evaluating and updating the steep slope ordinance based upon need.

Wetlands

As documented by the New Jersey Department of Environmental Protection, wetlands are valuable components of watersheds for many reasons. Freshwater wetlands are areas of low topography typically exhibiting poor drainage and standing water or a high groundwater table much of the year.

They are characteristically occupied by wet or hydric soils and hydrophytic vegetation. Wetlands serve valuable ecological functions such as storing floodwaters, filtering pollutants, allowing for groundwater recharge and providing wildlife habitat. According to NJ DEP, as wetland area and function decrease over a period of years or decades, the overall quality and quantity of the surface water flow within the watershed is altered and often expensive man-made utilities are required to make up for the loss of the wetlands. In Highlands, no wetlands are identified within the State's digital geographic information system mapping. However, several small isolated wetlands have been identified during the site development process, i.e., site plan review.

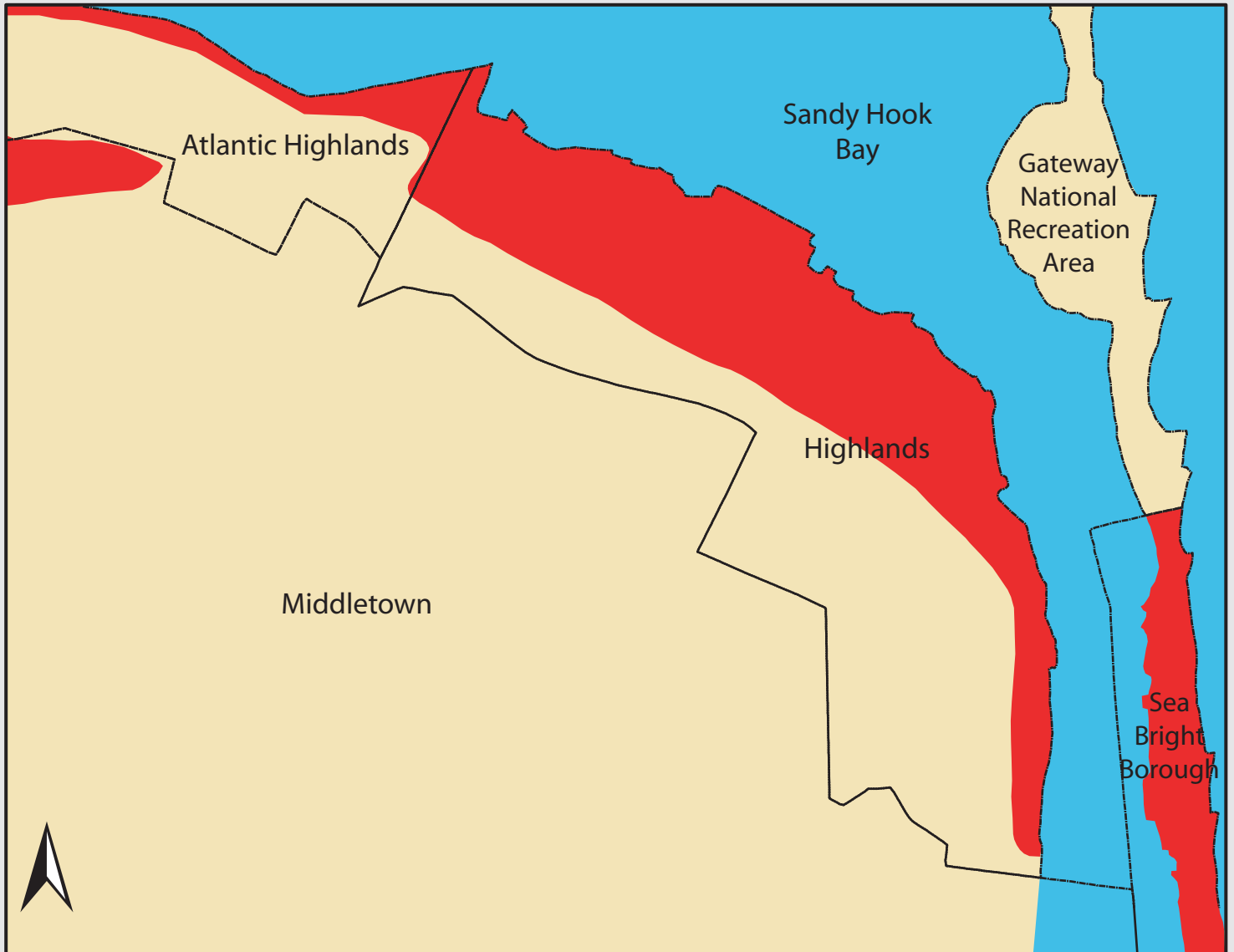
Floodplains

In Highlands, a substantial portion of the Borough lies within a floodplain as documented by the Federal Emergency Management Agency (FEMA) mapping (see Figure LU-4). As mentioned in the Land Use Element of this Master Plan, additional rules and regulations govern development and redevelopment in the floodplain. Highlands Flood Damage Prevention Ordinance 0- 99-11 Part 7, Article XXIV of the Zoning Ordinance, adopted August 18, 1999 is the regulatory ordinance pertaining to floodplains. The purpose of this Zoning Ordinance is to protect the public health and safety, and prevent construction practices that will increase flooding, and preserve our natural environments.


Critical Environmental Sites and Historic and Cultural Sites (CES and HCS)

According to the State Development and Redevelopment Plan (SDRP), "designating a site as a CES or an HCS means that the site is of local, regional or statewide significance and that its protection and enhancement is of primary importance." The SDRP continues to indicate that there is a need to preserve the connection to the natural systems or cultural fabric of which the site is a part. The designation as a CES or HCS is intended to help organize planning for new development or redevelopment by singling out the elements of natural systems and historic sites that should continue to be expressed in the future landscape through protection and restoration (See CF-5).

FIGURE CF-5
CRITICAL ENVIRONMENTAL SITES (CES)
AND HISTORIC AND CULTURAL SITES (HCS) MAP



KEY

 CES and HCS sites

CES/HCS SITES MAP

Highlands Borough, Monmouth County, New Jersey

Figure CF-5



N.T.S. October 2004

CES and HCS sites are of local, regional or statewide significance. Their protection and enhancement has been determined to be of primary importance. Any changes proposed by the Borough within the CES or HCS area in Highlands should preserve the natural cultural fabric of which they are a part.

Coastal Zone Management

The federal Coastal Zone Management Program (CZMP), authorized by the Coastal Zone Management Act (CZMA) of 1972, is a unique federal-state partnership that provides a framework for states to develop management strategies to protect, restore and responsibly develop and redevelop coastal communities. Administered by the National Oceanic and Atmospheric Administration (NOAA), the law permits the State of New Jersey to determine how best to balance conservation and development/redevelopment in the coastal zone.

According to the New Jersey Office of Coastal Planning, each year New Jersey receives federal funding to support planning, regulatory and enforcement programs aimed at protecting the state's coastal resources, controlling the impacts of development on the coastal ecosystem, and enhancing public access opportunities along the shoreline.

The Office of Coastal Planning supports the efforts of a number of programs that comprise the federally approved coastal program and provides technical expertise to local decision makers. This Plan specifically recommends creating a partnership with the Office of Coastal Planning prior to conducting any waterfront redevelopment efforts.

Water Quality

In urbanized or built-up areas, a higher percentage of impervious cover exists in comparison to less developed areas. As a result, runoff from rain and the melting of snow collects sediment, chemicals and other pollutants and deposits them into the Shrewsbury River and the Sandy Hook Bay. According to NJ DEP, these pollutants include:

- Excess fertilizers, herbicides, and insecticides from agricultural lands and residential areas;
- Oil, grease, and toxic chemicals from urban runoff and energy production;
- Sediment from improperly managed construction sites, crop and forest lands, and eroding stream banks;

- Salt from irrigation practices and acid drainage from abandoned mines;
- Bacteria and nutrients from livestock, pet wastes, and faulty septic systems;
- Atmospheric deposition and hydromodification are also sources of nonpoint source pollution.

Why is this important in Highlands? Nonpoint source pollution is the leading remaining cause of water quality problems. The effects of nonpoint source pollutants on specific waters are difficult to fully assess. However, the negative impacts of nonpoint source pollution on drinking water supplies, recreation, fisheries, and wildlife is well documented. The following are NJ DEP recommended actions to help reduce nonpoint source pollution:

- Keep litter, pet wastes, leaves, and debris out of street gutters and storm drains--these outlets drain directly to lake, streams, rivers, and wetlands.
- Apply lawn and garden chemicals sparingly and according to directions.
- Dispose of used oil, antifreeze, paints, and other household chemicals properly, not in storm sewers or drains. If your community does not already have a program for collecting household hazardous wastes, ask your local government to establish one.
- Clean up spilled brake fluid, oil, grease, and antifreeze. Do not hose them into the street where they can eventually reach local streams and lakes.
- Control soil erosion on your property by planting ground cover and stabilizing erosion-prone areas.
- Encourage local government officials to develop construction erosion/sediment control ordinances in your community.
- Have your septic system inspected and pumped, at a minimum, every 3-5 years so that it operates properly.
- Purchase household detergents and cleaners that are low in phosphorous to reduce the amount of nutrients discharged into our lakes, streams and coastal waters.

RECREATION AND OPEN SPACE

To determine Highlands' open space and recreation needs, two distinct methodologies were utilized.

The first analysis, called the balanced land use approach, estimates the land area which should be owned and controlled by the Borough and dedicated for public use and access for outdoor

recreation. The second analysis, known as the core system standard, predicts the necessary amount of open space to protect the important natural resources and to retain a high quality of life for Borough residents.

Outdoor Recreation Needs

Recreation is required to maintain a healthy way of life. What people do to recreate is a response to their internal needs and desires. The quality and quantity of recreational opportunities available to a community has a direct effect on the community's general quality of life. To satisfy the recreational needs and wishes of an entire community, many variables must be considered. It is important to realize that the recreational opportunities will serve a variety of different individuals. To ensure that the Borough can provide residents with a variety of needed recreation programs and facilities, there should be a core system of lands owned and controlled by the Borough and dedicated to local public recreation use.

Estimate of Need Based Upon Balanced Land Use Standards

The first estimation method is the Balanced Land Use approach. Balanced Land Use is the methodology utilized by the State of New Jersey to calculate public open space needs. This approach estimates the *minimum* land area in Highlands that should be dedicated as Borough public open space. The approach takes into consideration that recreation and open space demands are generated by development, which will occupy the remaining land area of the Borough.

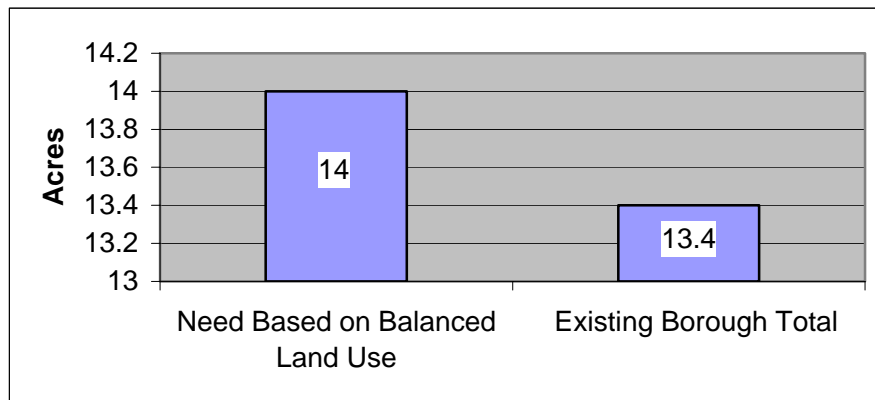
The Balanced Land Use Standard indicates that individual municipalities should set aside 3% of their developed and developable area for recreation. The guidelines also suggest 7% be set aside by each county, 10% by the state, and 4% by the federal government. Undevelopable land such as wetlands and land preserved as open space by the County or State governments is subtracted out of the total land area to calculate the municipal need for public recreation and open space land.

**TABLE CF-5
 BALANCED LAND USE CALCULATION**

	ACRES
Total Township Area =	459
(-) Undeveloped Wetlands and Floodplains =	0
(-) State, and County Parklands =	0
Total =	459
<hr/>	
3% of Total =	14

Source: NJDEP GIS Data & T&M Associates

**TABLE CF-6
 HIGHLANDS BOROUGH
 NEED FOR MUNICIPAL PARK AND RECREATION AREAS
 (BALANCED LAND USE)**



Compiled by: T&M Associates

Using the Balanced Land Use standard, the estimated land required for local public recreation and open space in Highlands is 14 acres (see Exhibit CF-5). Based upon the existing 13.4 acres of park and recreation land in the Township, a minimal deficit exists in comparison to the minimum suggested by the Balanced Land Use criteria (see Table CF-6).

Estimate Of Need Based Upon Core System Standards

The second estimation of need method is the Core System standard. The National Park and Recreation Association (NPRA) developed this method. The Core System standard is used to estimate need based on existing and projected population. The NPRA standards, published in the NPRA *Recreation, Park, and Open Space Standards and Guidelines*, provide guidance for developing a core

system of public parks for local close-to-home recreation uses. The standards suggest public park and recreation areas be provided to local residents at the ratio of 10.5 acres of parkland per 1,000 people.

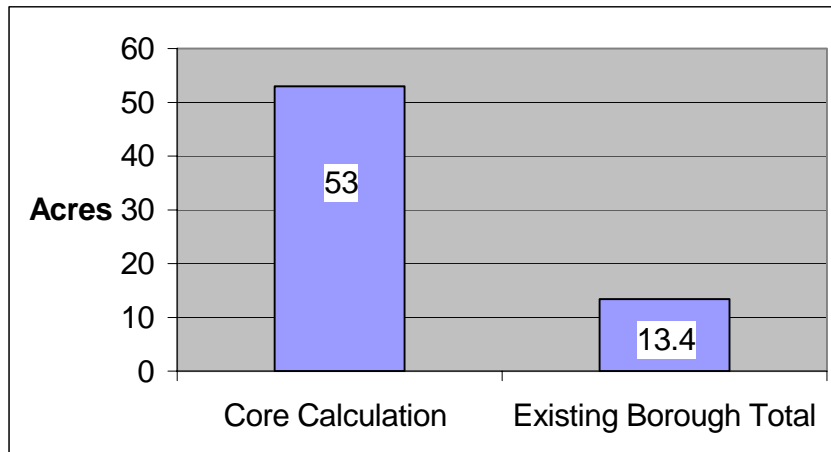
**TABLE CF-7
CORE CALCULATION**

Standard = 10.5 acres per 1,000 people

	Population	Calculated Acres
2000	5,097	53.5

Source: US Census

**TABLE CF-8
HIGHLANDS BOROUGH
NEED FOR MUNICIPAL PARK AND RECREATION AREAS
(CORE CALCULATION)**



Based upon the existing 13.4 acres of park and recreation land and the Borough's 2000 population of 5,097 people, there is a shortfall of open space and parklands. In summary, the Core System approach suggests that the Township park system can not adequately support the existing or future population.

The Balanced Land Use Standard and the Core System Standard are methodologies that should be used with caution. They are intended to serve as a guide to determine the necessary open space in a community and are not an exact science. This Plan specifically recommends that the Borough create a Recreation and Open Space Committee to identify local recreation and open space needs.

Green Acres Program

One opportunity to acquire monies to create recreation and open space opportunities is through the New Jersey Department of Environmental Protection Green Acres Program (Green Acres). Green Acres provides 50% matching grants and low-interest loans to local governments for the acquisition of land for recreation and conservation purposes. To qualify for this funding, local governments must have an adopted open space and recreation plan, and either an open space tax or an approved alternative funding source which is stable and sufficient to effect an annual tax levy.

To further efforts to create additional open space, the Borough should investigate these options.