



UNION BEACH

Borough of Union Beach Master Plan

Monmouth County, NJ

October 26, 2005

Prepared by



MASTER PLAN
BOROUGH OF UNION BEACH
MONMOUTH COUNTY, NEW JERSEY

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October 7, 2005

ADOPTED ON OCTOBER 26, 2005

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¹ This Master Plan includes the Borough's Stormwater Management Plan Element which was adopted on March 30, 2005. Table 3 - Existing Land Use and Figure 3 - Existing Land Use have been replaced with parcel based land use calculations and mapping that was prepared during the preparation of the Land Use Plan Element. Additionally, a clearer zoning map was created (Figure 4). Otherwise the Stormwater Management Plan remains unchanged as adopted on March 30, 2005.

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STATEMENT OF GOALS AND OBJECTIVES

INTRODUCTION

The Borough of Union Beach Master Plan is intended to guide the growth and development of the Borough over the course of the next 6 years. The Municipal Land Use Law requires that all Master Plans contain a statement of principles, assumptions, policies and standards upon which the constituent proposals for the physical, economic and social development of the municipality are based. The Goals and Objectives Element of the Master Plan satisfies this requirement and provides the foundation for the other components of the Plan.

GOALS AND OBJECTIVES

Residential

1. Preserve and protect the existing residential character of the Borough. Require that infill development be compatible with the neighborhood and conform to the setbacks of existing buildings on the block.
2. In developed areas, limit new development and infill development that increases the intensity of neighborhood land and property use.
3. Ensure that public and quasi-public land use remains compatible with the needs and character of adjacent neighborhoods.
4. Limit developments that would generate a high volume of traffic on local streets.
5. Encourage the maintenance and preservation of residential properties.
6. Identify sources of funds for rehabilitation of residential dwellings and provide assistance to property owners in procuring funds.
7. Promote preservation and restoration of housing that has historical significance when feasible.

Commercial

1. Continue the improvement of commercial properties in the Borough.
2. Strive to enhance and retain existing businesses and promote new business development along commercially zoned areas of Route 36, Union Avenue, Florence Avenue and Front Street.
3. Provide for adequate parking to serve established residential and commercial areas. Incorporate adequate parking into new developments.

4. Encourage shared parking when appropriate to meet parking demands while limiting the amount of impervious surfaces.
5. Require buffering around commercial properties to soften the visual and functional impact of their design and use.
6. Strictly enforce sign regulations.
7. Encourage revitalization of commercial properties that need rehabilitation or improvement.
8. Encourage upgrading of commercial properties and their surroundings.
9. Encourage the development of small-scale commercial and office uses and encourage the design of buildings with a residential scale in the Office-Residential District.
10. Create attractive gateways at the principal entrances to the Borough through upgraded land uses, streetscape improvements and signage.

Circulation

1. Increase bicycle/pedestrian safety and circulation at key intersections by utilizing traffic calming measures and providing bike lanes that connect with the Heritage Trail and community facilities throughout the Borough.
2. Ensure a well maintained and safe circulation system.
3. Coordinate maintenance and improvement actions with neighboring communities and Monmouth County.
4. Monitor areas with high traffic accident rates and develop improvement programs.
5. Discourage developments that do not meet minimum frontage requirements on public or private roads.
6. Encourage circulation patterns that are compatible with land use goals and public safety.
7. Improve the appearance of intermediate and major thoroughfares, such as Route 36, Union Avenue and Florence Avenue.
8. Encourage landscaping along intermediate and major thoroughfares to buffer residential and non-residential land uses from the noise and pollution of vehicle traffic.
9. Cooperate with NJDOT and adjacent communities to improve the appearance of entranceways into the Borough from Route 36.

Economic Development/Redevelopment

1. Encourage the development of a diversified economic base that generates employment growth, provides increased tax ratables, increases income levels and promotes the reuse of underutilized properties.
2. Focus economic activity in the Borough's economic centers including the International Flavor and Fragrance (IFF) company, JCP&L properties and existing non-residential areas. Recognize the unique character of each area and promote development that will strengthen and reinforce market niches.
3. Capitalize on the Borough's competitive advantages for economic development purposes including its location in the New Jersey/New York City region, extensive transportation and quality of life.

Housing

1. Preserve established residential character wherever possible by preventing the intrusion of incompatible commercial and industrial uses into residential neighborhoods and promoting the rehabilitation of substandard units.
2. Provide a balance of housing options to meet the needs of all residents including low and moderate income housing and market rate housing.
3. Encourage residential rehabilitation to improve substandard units and preserve neighborhood stability.
4. Encourage the development of housing that is affordable to younger couples and families seeking to remain in, or move to, the Borough.
5. Promote the development of senior citizen housing that enables older residents to “age in place” including independent living, assisted living and congregate care housing.
6. Enforce the property maintenance code to improve the aesthetics and image of the Borough.
7. Review the possibility of adopting a “growth share” ordinance to capture opportunities for new affordable housing and address the Borough’s growth share obligation as new development occurs.

Community Facilities and Utility Infrastructure

1. Provide adequate sewer and water services to meet the demands of proposed economic development and a growing population in a manner that will limit sprawl and promote concentrated development.
2. Improve stormwater management along the bay front, roads and intersections through effective infrastructure, maintenance, and replacement.
3. To achieve the stormwater quality standards established by the NJ Department of Environmental Protection.
4. Preserve and upgrade the existing utility infrastructure including water, stormwater management and wastewater treatment. Continue rehabilitation programs while pursuing selected replacement and expansion projects in order to accommodate growth and revitalization.
5. Encourage regularly scheduled infrastructure maintenance consistent with long-range plans to avoid system failures.
6. Study and periodically review future service needs and implementation methods.
7. Continue trash reduction, reuse, and recycling efforts in cooperation with appropriate County, Regional, and State agencies.
8. Maximize the use of existing and planned facilities consistent with the efficient use of public funds.
9. Maintain facilities that are in current use and renovate or reuse obsolete facilities for other uses.
10. Cooperate with surrounding communities, County, and State organizations to make the best use of available public facilities.

Open Space and Recreation

1. Provide adequate park, open space, and recreational facilities for all Borough residents.
2. Cooperate with public and quasi-public institutions to utilize and maintain recreation facilities and their undeveloped land for open space or recreation.
3. Consider the preparation of a Recreation and Open Space Plan Element.

Community Identity

1. Develop and effectively communicate a strong and appealing identity for the Borough.
2. Create attractive, memorable "gateways" into the Borough.
3. Develop and implement streetscape projects for major public thoroughfares.
4. Preserve and protect historic and major natural features in the Borough.
5. Enhance and maintain the appearance of community facilities and Borough owned properties.
6. Encourage higher quality architectural and landscape design through the use of design standards.
7. Encourage neighborhoods to improve their aesthetic appeal and identity.

Cultural

1. To encourage sensitive design in the conversion and re-use of the buildings and their environment and to mitigate the effect of adjoining developments.
2. Expand recreational and cultural facilities and services.

**STRENGTHS/WEAKNESSES OF THE BOROUGH IDENTIFIED BY
STAKEHOLDERS (not listed in any specific order)**

The Master Plan Subcommittee of the Planning Board was charged with creating a new Master Plan for the Borough. This Master Plan is the result of a consensus-based process that included interviews with major stakeholders in the community. This process included the creation of a community survey and interviews with Borough officials and resulted in the identification of the following Strengths and Weaknesses of Union Beach.

Strengths

1. Strategic location
2. Amenities of the landscape
3. Magnificent view
4. Public access to the waterfront
5. Small town quality of life
6. Good fishing
7. Access to major transportation

8. Community involvement
9. Ability to access local officials
10. Existing Services, i.e., police, fire, etc.
11. Continually improving
12. Good place to raise a family

Weaknesses

1. High tax rate
2. Percentage of Borough that is flood prone
3. A neighborhood character issue is emerging – many new houses are out of scale with existing development
4. Lack of downtown business area
5. Lack of non-residential ratables
6. Lack of public concern for open space acquisition
7. Old infrastructure
8. Speeding on local roadways
9. Poor building design in areas
10. The construction of new homes that are out of character with the area and are proportionally large for their respective lot (McMansions)

OPPORTUNITIES/CONSTRAINTS OF THE BOROUGH IDENTIFIED BY STAKEHOLDERS AND THE COMMUNITY (not listed in any specific order)

Opportunities

1. Creation of a new vision and future land use plan for the IFF campus and Natco Lake to be funded by a Smart Growth Planning Grant.
2. Opportunities for revitalization and controlled growth of both residential and non-residential areas
3. Program of street reconstruction and infrastructure changes
4. Traffic calming improvements
5. Boat ramp near Union and Front Streets

Constraints

1. Limited available vacant land
2. Perceived high tax rate
3. Flood prone areas/FEMA program
4. Established development pattern

DEMOGRAPHIC AND ECONOMIC DATA

INTRODUCTION

This element presents general housing and demographic information for Union Beach Borough (Tables D-1 to D-11). It is important to understand demographic conditions and population trends in order to effectively plan for the Borough's present and future development. Although past trends do not necessarily predict future conditions, they do provide a sense of the Borough and call attention to emerging trends.

DEMOGRAPHIC CHARACTERISTICS

Population Trends

Union Beach Borough experienced a population growth of 8 percent (493 persons) from 1990 to 2000, as shown in Table D-1. In comparison, Monmouth County grew by 11 percent and the state of New Jersey grew by 9 percent. When considering that the Borough has been predominantly built-out for many years, a growth rate of over 5 percent is somewhat significant. During the same time period, the number of housing units increased from 2,080 in 1990 to 2,229 in 2000, a 7 percent increase in housing units. Growth in the Borough is most likely associated with a considerable decline in the number of vacant owner and renter occupied housing units.

Union Beach Borough experienced rapid growth from 1940 to 1970, with the largest increase occurring between 1940 and 1950, when the population increased from 2,076 persons to 3,636 persons, a 75 percent increase. This number is greater than the County growth rate during the same time period at 40%. Population continued to increase at a slightly slower rate from 1950 to 1960 at a rate of 61 percent (5,862 persons), above the County growth rate of 38 percent.

The population of the Borough continued to increase between 1960 and 1970 by 10 percent (6,472 persons). The continued movement of population from urban areas to suburbs and to the major interchange areas along the Parkway led to secondary east - west corridor development. Accordingly, during the 1960s Monmouth County's population grew by 38 percent and New Jersey's population grew by 18 percent.

During the decade 1970 to 1980, the County and State population growth rates began to stabilize, while Union Beach population growth rate decreased at a significantly lower rate than the County and the State. In 1980, the population reached 6,354 persons, a negative 2 percent decrease compared to a 9 percent increase for the County and a 2 percent increase for the State.

Population growth continued to decrease in the 1990s by a 3 percent decline from 1980 to 1990, compared to a 10 percent increase for the County and a 5 percent increase at the state level. From 1990 to 2000, the Borough added 493 residents or 8 percent, for a total of 6,649 persons. The current 2000 population is the highest tally of residents in the Borough.

TABLE D-1
POPULATION 1940 – 2000
UNION BEACH BOROUGH, MONMOUTH COUNTY, NEW JERSEY

Year	BOROUGH		MONMOUTH COUNTY		NEW JERSEY	
	Population	Percent Change	Population	Percent Change	Population	Percent Change
1940	2,076	---	161,238	---	4,160,165	---
1950	3,636	75%	225,327	40%	4,835,329	16%
1960	5,862	61%	334,401	48%	6,066,782	25%
1970	6,472	10%	461,849	38%	7,171,112	18%
1980	6,354	-2%	503,173	9%	7,365,011	2%
1990	6,156	-3%	553,124	10%	7,730,188	5%
2000	6,649	8%	615,301	11%	8,414,350	9%

*SOURCE: NEW JERSEY DEPARTMENT OF LABOR, DIVISION OF PLANNING AND RESEARCH NJ POPULATION TRENDS: 1790 to 1990 & US Bureau of Census 2000.
 COMPILED BY: T&M ASSOCIATES*

Population Composition by Age, Race and Sex

Table D-2 presents the 1990 and 2000 population by age groups for Union Beach Borough and Monmouth County. In both time periods, the Borough median age is less than the County median age. As shown, both the Borough and the County experienced slight increases in the 5-14 and 55-64 age groups. Slight decreases in the Borough and the County can be seen in the under 5, 15-24, and 65 and over age groups. Both the Borough and the County experienced significant increases in the 35-44 and 45-54 age groups, and significant decreases in the 25-34 age groups.

According to the U.S. Census, the majority or 60.8 percent or 4,042 persons of the Borough is characterized as within the “working years” (20 to 64 years), 24.5 percent or 1,626 persons are within the “school years,” 7.5 percent or 498 persons are 65 years or older and 483 persons or 7.3 percent are within the preschool years (0 to 4).

Population trends within Union Beach Borough are influenced by a variety of factors including national, state and regional economic conditions, social changes and government policy. Changing birth rates, changing employment trends and consumer preferences, the availability of land and other factors can affect future development within the Borough.

As updated census data for population and housing becomes available, the Planning Board should monitor population growth and composition and review its planning program to determine how the needs and desires of present and future residents of Union Beach Borough may be changing.

TABLE D-2
POPULATION DISTRIBUTION, 1990 & 2000
UNION BEACH BOROUGH AND MONMOUTH COUNTY

	1990 % of Population		2000 % of Population	
	Borough	County	Borough	County
Under 5	8.3	7.0	7.3	6.9
5-14	15.8	13.3	16.8	15.1
15-24	14.5	13.1	13.3	11.0
25-34	18.6	16.5	13.8	12.2
35-44	16.2	16.7	19.3	18.2
45-54	10.0	11.5	14.1	15.0
55-64	7.4	9.1	8.0	9.1
65 and over	9.3	12.7	7.5	12.5
Totals	100%	100%	100%	100%
Median Age	31.5	35	34.4	37.7

SOURCE: US Bureau of Census 1990/2000
COMPILED BY: T&M ASSOCIATES

POPULATION CHARACTERISTICS

The general characteristics of the Borough's population can be determined from the U. S. Census of Population in 2000. These characteristics include age, sex, race, employment and income.

Age

The 2000 U.S. Census recorded the median age of Union Beach Borough residents as 34.4. This is slightly lower than Monmouth County, which had a median age of 37.8.

Sex

Union Beach Borough population in 2000 was 49.5 percent female (3,291 persons) and 50.2 percent male (3,358 persons), which is consistent with County and State averages.

Race

The 2000 Census recorded the population of Union Beach Borough as 94.5 percent white, 0.9 percent black, 0.2 percent Native American, 1.2 percent Asian, and 3.2 percent some other race. In comparison, Monmouth County's race breakdown is as follows: 84.4 percent white, 8.1 percent black, 0.1 percent Native American , 4.0 percent Asian, and 3.4 percent some other race.

TABLE D-3
PERSONS BY RACE, 1990 AND 2000
UNION BEACH BOROUGH AND MONMOUTH COUNTY

Race	1990				2000			
	Union Beach Borough		Monmouth County		Union Beach Borough		Monmouth County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White	5,972	97.0	483,277	87.4	6,280	94.5	519,261	84.4
Black	37	0.6	47,229	8.5	58	0.9	49,609	8.1
American Indian, Eskimo, Aleut	10	0.2	712	0.1	13	0.2	879	0.1
Asian or Pacific Islander	52	0.8	15,224	2.7	82	1.2	24,556	4.0
Other	85	1.4	6,682	1.2	216	3.2	20,996	3.4
Total	6,156	100	553,124	100	6,649	100	615,301	100

SOURCE: US Bureau of Census 1990/2000
COMPILED BY: Te&M ASSOCIATES

Employment

A total of 3,418 persons were part of the labor force in Union Beach Borough in 2000. Of that total, 3,230 of these persons were employed while 188 persons were unemployed accounting for a 3.8 percent unemployment rate. Union Beach's unemployment rate is slightly higher than the Monmouth County rate of 3.0 percent in 2000.

Income

The median household income of Union Beach in 1999 was \$55,146. This was less than the Monmouth County median household income of \$64,271 and the New Jersey median household income of \$59,946.

TABLE D-4
MEDIAN HOUSEHOLD INCOME, 1989 & 1999
UNION BEACH BOROUGH, MONMOUTH COUNTY, AND NEW JERSEY

	1989 Median Household Income	1999 Median Household Income	Percent Change 1989-1999
New Jersey	\$40,927	\$55,146	34.7
Monmouth County	\$45,912	\$64,271	40.0
Union Beach Borough	\$38,926	\$59,946	54.0

SOURCE: US Bureau of Census 1990/2000
COMPILED BY: T&M ASSOCIATES

Income levels are affected by educational attainment, occupation and age. Education and occupation are related to earning potential and higher incomes for workers while income generally declines after retirement.

EXISTING HOUSEHOLD CHARACTERISTICS

Household Size

Table D-5 presents the households in 2000 by number of persons in the Borough and the County. The average household size is 3.13 persons in the Borough, which is slightly higher than the County 2.87 household size. The Census defines a household as one or more persons, whether related or not, living together in a dwelling unit.

TABLE D-5
HOUSEHOLD SIZE, 2000
UNION BEACH BOROUGH AND MONMOUTH COUNTY

Household Size	Borough Number	Borough Percent	County Number	County Percent
Total households	2,143	100	224,236	100
1 Person	332	15.5	53,456	23.8
2 person	538	25.1	67,002	29.9
3 person	434	20.3	38,119	17.0
4 person	478	22.3	38,946	17.4
5 person	238	11.1	17,941	8.0
6 or more person	123	5.7	8,772	3.9
Average Household size (Owner-occupied)	3.13	N/A	2.87	N/A

SOURCE: US Bureau of Census 2000
 COMPILED BY: T&M ASSOCIATES

From 1990 to 2000, there was a 15.3 percent increase of 1 person households. Although not as significant of an increase, household size in the Borough is most likely to include 2, 3, 4 and 5 person households.

TABLE D-6
HOUSEHOLD SIZE, 1990 AND 2000
UNION BEACH BOROUGH

Household Size	1990		2000		Change 1990-2000	
	Number	Percent	Number	Percent	Number	Percent
1 person	288	14.6	332	15.5	44	15.3
2 person	513	25.9	538	25.1	25	4.9
3 person	389	19.7	434	20.3	45	11.6
4 person	452	22.9	478	20.3	26	5.8
5 person	210	10.6	238	11.1	28	13.3
6 or more persons	126	6.4	123	5.7	-3	-2.4
Total	1,978	100	2,143	100		

SOURCE: US Bureau of Census 1990/2000
 COMPILED BY: T&M ASSOCIATES

Household Income

Household income accounts for all income of the householder and other individuals in the household. In the Borough almost a third have a household income of \$50,000 to \$75,000, which is greater than the County percent of 19.2. In the Borough, household incomes less than \$25,000 account for 15.1 percent, household incomes between \$25,000 to \$50,000 total 21.4 percent. Over a third of household incomes are greater than greater than \$75,000.

**TABLE D-7
 1999 HOUSEHOLD INCOME DISTRIBUTION
 UNION BEACH BOROUGH**

	Borough		County	
	Number of Households	Percent	Number of Households	Percent
Less than \$9,999	82	3.8	12,292	5.5
\$10,000 - \$14,999	73	3.4	9,194	4.1
\$15,000 - \$24,999	169	7.9	17,684	7.9
\$25,000 – \$34,999	154	7.2	19,394	8.6
\$35,000 - \$49,999	304	14.2	28,030	12.5
\$50,000 – 74,999	584	27.2	43,074	19.2
\$75,000 - \$99,999	418	19.5	32,229	14.4
\$100,000 - \$149,999	291	13.6	35,533	15.8
\$150,000 and more	72	3.4	27,017	12.1
Totals	2,147	100	224,447	100

*SOURCE: US Bureau of Census 2000.
 COMPILED BY: T&M ASSOCIATES*

HOUSING CHARACTERISTICS

According to the 2000 Census, there are 2,229 housing units of which 16.0 percent of all housing units are rentals (Table D-8). In comparison, Monmouth County's percentage of renter occupied housing units is 20.5 percent, almost 5 percent higher than Union Beach. Generally speaking, high renter occupancy rates are an indication of an unstable housing market and transitional local population.

In 2000, the Borough maintained an owner occupied vacancy rate of 3.9 percent. Eighty four percent of the units in the Borough are owner occupied, which is an indication of a stable population base. One rationale for promoting owner occupied home ownership is that it creates

external benefits for individual homeowners and neighborhoods. Typically, absentee landlords do not maintain properties to the same level as homeowner occupied housing units.

TABLE D-8
HOUSING DATA IN 2000
UNION BEACH BOROUGH

Characteristics	Number	Percent
Total housing units	2,229	
Occupied housing units	2,143	96.1
Vacant housing units	86	3.9
Tenure of occupied units	2,143	
Owner occupied	1,800	84.0
Renter occupied	343	16.0
Year Structure Built	2,229	
1999 to March 2000	0	0.0
1995-1998	104	4.7
1990-1994	58	2.6
1980-1989	217	9.7
1970-1979	131	5.9
1960-1969	215	9.6
1940-1959	983	44.1
1939 or earlier	521	23.4
Units in structure	2,229	
1 unit detached	2,066	92.7
1 unit attached	45	2.0
2 units	88	3.9
3 or 4 units	20	0.9
5 to 9 units	10	0.4
10 to 19 units	0	0.0
20 or more units	0	0.0
Mobile home	0	0.0
Number of rooms	2,229	
1 room	0	0.0
2 rooms	0	0.0
3 rooms	74	3.3
4 rooms	358	16.1
5 rooms	603	27.1
6 rooms	560	25.1
7 rooms	312	14.0
8 rooms	188	8.4
9 or more rooms	134	6.0

SOURCE: US Bureau of Census 2000
COMPILED BY: Te&M ASSOCIATES

**TABLE D-9
 INDICATORS OF HOUSING CONDITIONS, 2000
 UNION BEACH BOROUGH**

	Number	Percent
Total	2,143	
Lacking complete plumbing facilities	0	0.0
Lacking complete kitchen facilities	18	0.8*
No telephone service	19	0.9
Occupants per room		
1.00 or less	2,075	96.8
1.01-1.50	50	2.3
1.51 or more	18	0.8

SOURCE: US Bureau of Census 2000
 *Based on 100-Percent Data Housing Units
 COMPILED BY: T&M ASSOCIATES

**TABLE D-10
 HOUSING VALUES, 2000
 UNION BEACH BOROUGH**

Value Range	Number	Percent
Less than \$99,999	217	12.7
\$100,000-\$199,999	1,410	82.3
\$200,000-\$299,999	62	3.6
\$300,000-\$499,999	24	1.4
\$500,000 or more	0	0.0
Total Owner-Occupied	1,713	100
Median Value	\$132,800	
Contract Rent		
Less than \$499	25	7.4
\$500-\$749	116	34.3
\$750-\$999	131	38.8
\$1000 or more	48	14.2
Total with cash rent	320	94.7
No Cash Rent	18	5.3
Total	328	100
Median Contract Rent	\$780	

SOURCE: US Bureau of Census 2000
 COMPILED BY: T&M ASSOCIATES

Since the Borough is predominantly built-out, growth is expected at a rate slower than the County and the State. New population growth is anticipated to occur as the result of new residential infill housing.

DEVELOPMENT PATTERNS

A review of building permits issued from 1980 through 2002 shows that growth in Union Beach Borough peaked in 2000, but, remained relatively steady from 1980 to 2000, sharply declined thereafter, and began to increase to the 25 year average in 2004. Table D-11, Building Permits: 1980 - 2004, documents the building permit trends for the last two decades.

TABLE D-11
BUILDING PERMITS: 1980 – 2004
UNION BEACH BOROUGH

YEAR	TOTAL BUILDING PERMITS	SINGLE FAMILY	TWO FAMILY	3 TO 4 FAMILY	5 OR MORE FAMILY
1980	1	1	0	0	0
1981	10	10	0	0	0
1982	9	9	0	0	0
1983	15	15	0	0	0
1984	26	26	0	0	0
1985	24	24	0	0	0
1986	15	10	2	3	0
1987	19	19	0	0	0
1988	17	17	0	0	0
1989	10	10	0	0	0
1990	5	5	0	0	0
1991	8	8	0	0	0
1992	7	7	0	0	0
1993	22	22	0	0	0
1994	24	24	0	0	0
1995	11	11	0	0	0
1996	11	11	0	0	0
1997	21	17	4	0	0
1998	12	12	0	0	0
1999	19	19	0	0	0
2000	39	39	0	0	0
2001	8	8	0	0	0
2002	6	6	0	0	0
2003	6	6	0	0	0
2004	14	6	0	0	8
			1980-2004		
TOTALS	359	342	6	3	8

SOURCES: NEW JERSEY DEPARTMENT OF LABOR, DIVISION OF PLANNING AND
 RESEARCH "RESIDENTIAL BUILDING PERMITS: YEARLY SUMMARIES
 1980-2004 AND MONTHLY SUMMARIES – 2004
 COMPILED BY: T&M ASSOCIATES

LAND USE PLAN

INTRODUCTION

The Borough of Union Beach is a 1.83-square mile municipality located in northeastern Monmouth County adjacent to Keyport, Hazlet, West Keansburg and the Raritan Bay. Union Beach is a developed suburban community, with a population density of 4,208 persons per square mile.² The Borough's population increased by eight percent from the 1990 US Census. The 6,649 residents represent the peak population recorded in Union Beach to date. Considering that minimal vacant land devoid of environmental constraints exists in the Borough, the population is anticipated to remain stable.

The Land Use Element is perhaps the most important element of the Master Plan. Its primary purpose is to establish the framework to guide the future physical development of the community. It has the broadest scope and has the role of bringing together all of the elements of the Master Plan. The Land Use Element is a 'living' document where new policies or objectives to guide development within Union Beach are proposed and implemented. Subsequently, the means of implementing this policy, -- zoning and subdivision regulations -- are modified to be consistent with the Master Plan.

LAND USE ISSUES

There are several land use issues which are addressed in the Land Use Plan, as follows:

1. Ramifications of existing undersized lots in the Borough and recent ordinance changes.
2. Need for better nonresidential design standards on Route 36.
3. Identification of the Smart Future Planning Grant received to study future land use alternatives for the IFF properties.
4. Discussion of recreation and open space possibilities within the Borough.
5. Need to incorporate traffic calming techniques to slow traffic on residential streets.
6. Review uses that are no longer appropriate or missing appropriate uses in zone districts.

² This calculation is based upon acreage calculated within the Borough Geographic Information System and the Borough population in the year 2000 according to the US Census.

7. Address parking needs in established commercial areas and planning for parking demand associated with residential and commercial growth in targeted areas of the Borough.
8. Evaluate the adopted zoning for consistency with the existing land use pattern. There are several areas of the Borough where zone changes are recommended to be consistent with existing land uses, while other areas remain nonconforming to encourage their transition to a conforming use over time
9. Need for commercial districts to have clearly defined uses to reflect the type of redevelopment most appropriate for the respective district.
10. Need for appearance and quality of commercial development to be enhanced in all non-residential districts. This can be achieved by creating improved bulk and design standards within Borough Ordinances.
11. Capitalize on the amenities of the waterfront, Heritage Trail and Route 36 to encourage economic development into non-residential districts.
12. Address flooding problems and the impacts of the Federal Emergency Management Agency Regulations.
13. Address appropriate infill residential and commercial development.
14. Land Use Element and Borough policies should be consistent with the State Development and Redevelopment Plan (SDRP) and NJ Coastal Management Rules.

EXISTING LAND USE

Union Beach is characterized as an older suburban single-family residential community. Adjacent to Raritan Bay, lot sizes range from approximately 2,000 square feet to 106 acres in size. Single-family housing is predominately located on lots ranging from 2,000 square feet to 75,620 square feet (1.73 acres) in size. It is important to note that a substantial amount of undersized lots exist in common ownership. In accordance with New Jersey statute, many of these lots have merged in accordance with “Loechner” provisions. While the Borough has adopted ordinances to regulate undersized lots, the existing tax maps do not reflect the lots as merged. This is one of the critical land use issues discussed later in this Plan.

The Borough does not contain transitional zones or areas, which act as a buffer between two land uses of different intensity. While this is an acceptable land use practice, it requires a greater consideration of appropriate buffer areas between residential and nonresidential uses. Nonresidential uses are primarily located on Route 36, Union Avenue, Florence Avenue and Front Street. In addition to the highway commercial zoning on Route 36, the Borough contains three mixed use commercial districts and one commercial district.

As depicted in Table LU-1, Union Beach Borough is 1.83 square miles in size or 1,172 acres. Residential land uses comprise 352 acres or 30.1% of land area in the Borough. Vacant property accounts for 305 acres or 26.1 percent of the total land area in Union Beach. It is important to note that the majority of this land is located within wetland areas or within the 100-year floodplain. The future development potential section of this Plan further elaborates upon residential development potential.

Industrial development accounts for 133.7 acres or 11.4% of the Borough. Commercial development accounts for 18.2 acres or 1.6% of the Borough. Active recreation lands account for 41 acres or 3.5% of the land total. Public open space and publicly owned environmentally constrained land represent 131 acres or 11.3% of land uses within the Borough. Lands associated with Streets and rights-of-way and riparian areas represent a significant portion of the Borough or 13.3%.

Figure LU-1 Existing Land Use

	<i>2000</i>	<i>2000</i>
<i>Land Use</i>	<i>Acres</i>	<i>Percent</i>
Residential	353	36.3%
Vacant land	305	26.1%
Commercial	18	1.6%
Industrial	134	11.4%
Active Recreation	41	3.5%
Public Environmentally Constrained Open Space	132	11.3%
Public/Quasi-public	32	2.8%
Rights-of-way/Riparian lands	156	13.3%
Total	1,171	100%

Source: Borough GIS and T&M Associates Field Survey

Figure LU-2
Existing Land Use
Borough of Union Beach
Monmouth County, New Jersey

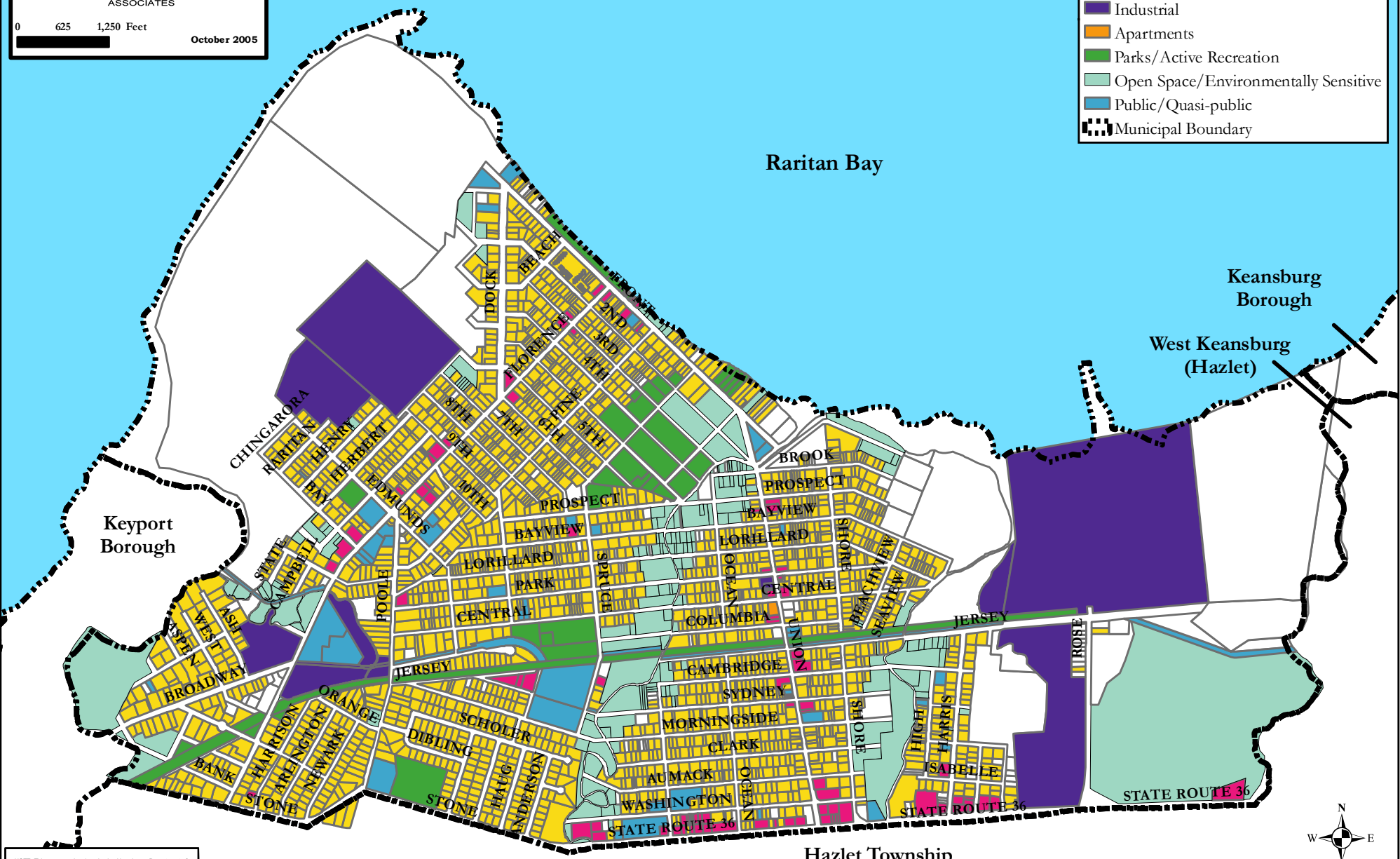


0 625 1,250 Feet

October 2005

Land Use

- Vacant Land
- Residential
- Commercial
- Industrial
- Apartments
- Parks/Active Recreation
- Open Space/Environmentally Sensitive
- Public/Quasi-public
- Municipal Boundary



NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.



FUTURE DEVELOPMENT POTENTIAL

Union Beach is a predominantly built-out community. Only a small percentage of the Borough consists of vacant developable land. The following analysis indicates the Borough's residential development potential.

As depicted in Figure LU-1, the Borough contains approximately 305 acres of vacant unimproved land. Out of the 305 acres, 282 acres are located within wetlands or the 100-year floodplain, thus leaving 23 acres that are not environmentally constrained. The majority of this development potential is located on Block 249, Lot 2, which is a vacant portion of the IFF site. This site is currently contaminated in accordance with NJ DEP criteria and is in the process of being cleaned up. Otherwise, approximately five (5) lots representing under an acre of land are vacant unimproved lots outside wetland and floodplain areas. These five (5) lots are scattered throughout the Borough.

POPULATION PROJECTION

As expressed in the future build-out section of this Plan, the Borough is predominantly built-out, having minimal new development potential. Unless redevelopment occurs in the Borough, which may have the effect of increasing residential density, the Borough's population will remain stable. As such, this is an unlikely scenario, future residential growth will be limited. Redevelopment³ will mostly consist of residential infill development, which is primarily oriented towards increased occupancy rates of rental units. This is consistent with the New Jersey Transportation Planning Authority (NJTPA) population projections for Union Beach. As indicated in the following table, NJTPA projects an annual increase of 18 persons per year in the Borough from 2005 to 2015 and a total of 60 households during this period.

NJTPA (MPO) Residential Growth Projection

<i>Projection Source</i>	<i>2005 Projection</i>	<i>2010 Projection</i>	<i>2015 Projection</i>	<i>2020 Projection</i>	<i>2025 Projection</i>
NJTPA	6,770	6,950	6,950	6,980	7,010

Population Change from 2005 to 2025 = 240 persons

³ In this context, redevelopment refers to demolishing an existing structure and replacing it with a new structure and should not be confused with a formal redevelopment process.

LAND USE PLAN

The Land Use Plan indicates the Master Plan's recommendations with respect to land use. Collectively, the Land Use Plan and corresponding map indicate the location and intensity of land for residential, commercial, industrial, public/quasi-public and other uses. The Land Use Plan is intended to guide the Borough to develop more detailed land use regulations, which are regulated by the Borough's ordinances.

Residential

Single-Family Residential (R-8)

The R-8 single-family residential district is designed for single-family development in detached structures. They are located throughout the Borough. Density in R-8 district is 5.8 units per acre. The district also permits schools and essential services. Conditionally permitted uses include churches and places of worship, multi-family dwellings, townhouses, marinas, home professional offices, public utilities and quasi-public recreation areas.

An evaluation of land uses within the R-8 district indicated that the R-8 district is primarily a single-family residential district coupled with some nonconforming non-residential uses. In an effort to maintain the existing character of the Borough, this Plan specifically recommends removing multi-family dwellings as conditionally permitted uses within the R-8 district. This Plan also recognizes the particular suitability to locate townhouses in certain areas of the Borough. To satisfy this need, this Plan recommends the creation of one new townhouse district, which is discussed later in this Plan.

The principal issues in the R-8 district are the preservation of the integrity of the existing single-family neighborhood by retaining its character and by providing flexibility for residential dwellings to be raised outside of the floodplain in accordance with FEMA regulations. Under current FEMA regulations the following improvements are required for new construction projects or substantial improvement projects (within the 100 year floodplain) to existing structures (when the value of the improvements exceeds 50% of the market value of the structure):

1. All structural components must be adequately connected and anchored to prevent flotation, collapse, or permanent lateral movement of the building during floods.

2. Building materials and utility equipment must be resistant to flood damage. All machinery and equipment servicing the building must be elevated one foot above the Base Flood Elevation (BFE).
3. All utilities must be flood proofed to at least two feet above the BFE including: furnaces, heat pumps, hot water heaters, air-conditioners, washers, dryers, refrigerators and similar appliances, elevator lift machinery, and electrical junction and circuit breaker boxes.
4. Any space designed for human habitation must be elevated to one foot above the BFE, including bedroom, bathroom, and kitchen, dining living, family and recreation room.
5. Uses permitted in space below the BFE are vehicular parking, limited storage, and building access (stairs, stair- wells, and elevator shafts only, subject to design requirements described below for walls).

The Municipal Land Use Law (MLUL) in section 40:55D-66.5b indicates that family day care homes are a permitted use in all residential districts. The MLUL also indicates that the “requirements for family day care homes shall be the same as for single family dwelling units located within such residential districts.” This Plan specifically recommends updates to the Borough's Land Development Ordinance to permit family day care homes in the R-8 district.

R-AC Residential - Adult Community District

Following the adoption of the 1985 Master Plan, the Borough created the Adult Community District. The intention of the district is to provide a place in Union Beach for age-restricted development and a place for residents to “age in place” within the community.

Permitted use include:

1. Single-family dwellings for the habitation of people at age 52 years or older (children under nineteen years may not be in permanent residence, defined as seven consecutive days or thirty days in a year). As well as residential communities which maintain a private age restriction mechanism.
2. Federal, state, county and municipal buildings and grounds including schools, parks and playgrounds, but not workshops, warehouses, garages, and storage yards.
3. Private and parochial schools not operated for profit.
4. Essential services

Conditional Uses include:

1. Churches and places of worship
2. Public utilities
3. Quasi-public and private club recreational areas


While the Borough currently recognizes the need for age restricted housing, the Borough should investigate expanding areas of the Borough that permit this type of housing. Areas to be investigated include areas within the B-1 district on lots that are greater than one acre and in the newly proposed townhouse district.

Townhouse District

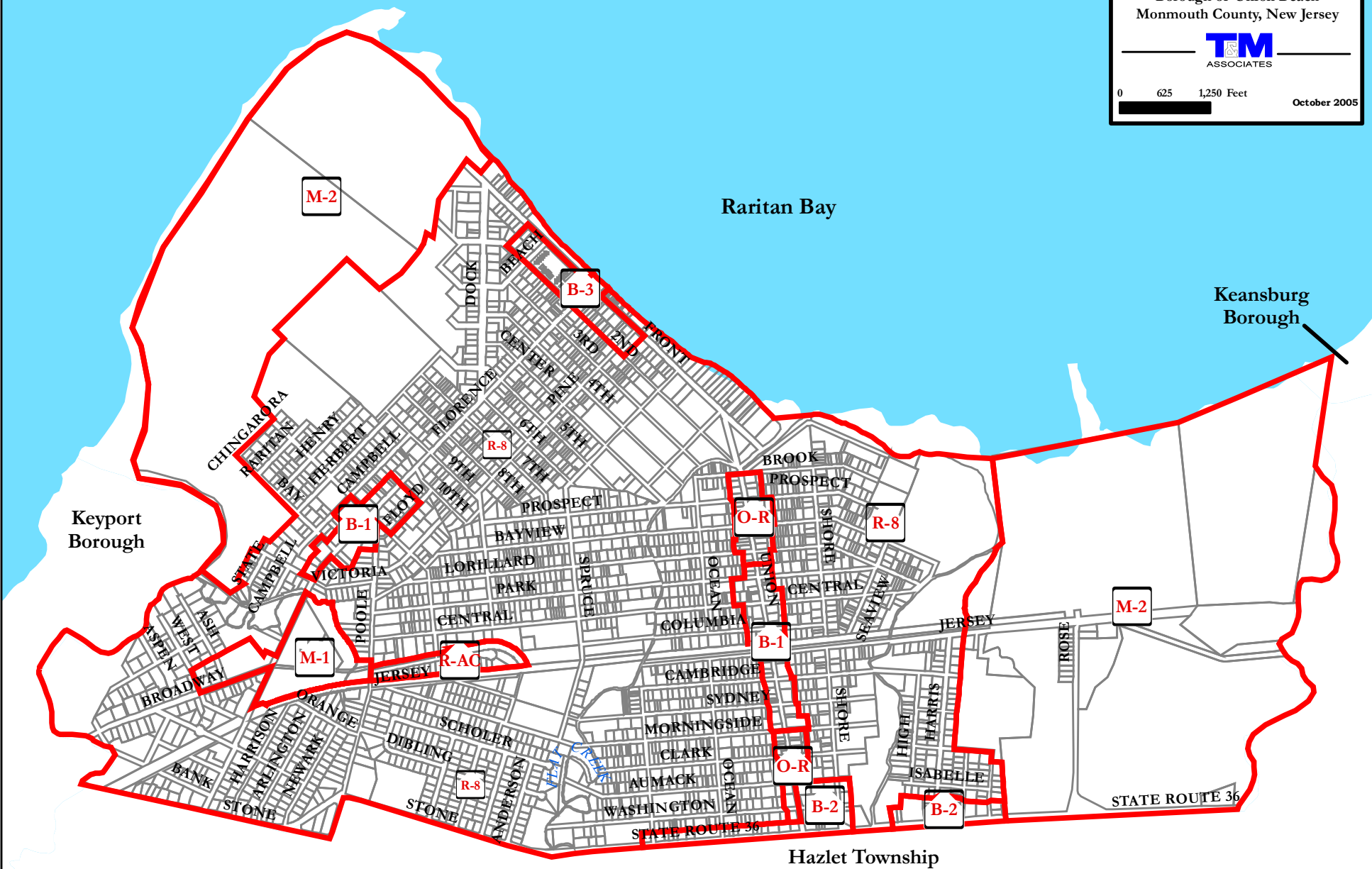
This Plan recommends the creation of one new Townhouse districts. This Plan recommends including townhouses as a principal permitted use in the TH district at a density not exceeding ten units per acre. The area adjacent to Brook Avenue and Front Street as identified in the Future Land Use Plan is recommended as the Townhouse district. This area has excellent views to the Raritan Bay and is well removed from the Borough's Promenade or primary public access area to the waterfront. The areas close proximity to undevelopable wetlands, creates as an isolated or detached area of the Borough. Buildings should be designed and placed on the site so as to visually compliment each other and the natural landforms of the site. Consideration should be given to various types of multi-family development that gives the flexibility to be creative while maintaining a reasonable density. This Plan specifically discourages long rows of townhouses that give the appearance of blank walls without articulation.

 Zone Districts

Figure LU-3
Existing Zoning
Borough of Union Beach
Monmouth County, New Jersey



0 625 1,250 Feet
October 2005



NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State authorized.



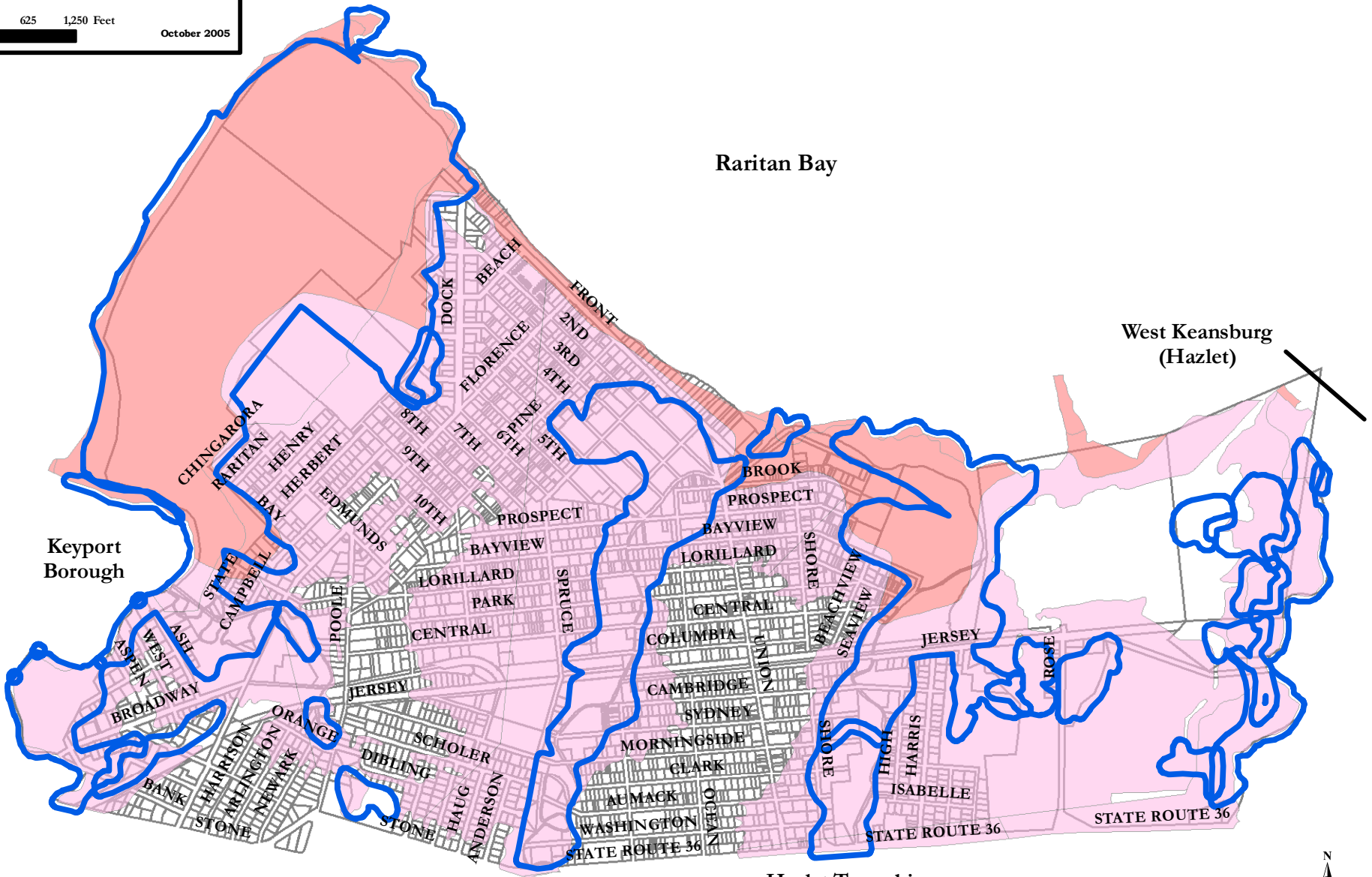
Figure LU-4
Wetlands and Floodplain
Borough of Union Beach
Monmouth County, New Jersey



0 625 1,250 Feet

October 2005

- Wetlands (with 50 buffer)
- FEMA Flood Hazard Areas
- 100 Year Flood Hazard
- Velocity Zone



NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State authorized.



Commercial

Neighborhood Business (B-1)

Union Beach contains two Neighborhood Business (B-1) districts. The larger B-1 district is located along Union Avenue just north of Park Avenue and extends to Morningside Avenue. As indicated in the Borough's 1985 Master Plan, the intention for this district is to encourage potential development of larger scale retail and commercial uses. The average lot size in the Union Avenue B-1 district is approximately 6,700 square feet. The depth of lots range from less than 100 feet to approximately 200 feet. However, most parcels have a depth of approximately 125 feet. Under today's development standards, the majority of these lots are not large enough to locate a commercial building containing the required parking, circulation, trash refuse and a landscaped buffer to residential properties.

The purpose and intent of this district is to provide for a variety of low intensity neighborhood commercial uses that require limited parking. Uses that share parking should be encouraged. Appropriate businesses are those that serve persons in the immediate surrounding residential area. The character of district should continue as a hamlet through the established mixture of uses, street environment and pedestrian orientation. Future development should be consistent with existing building forms, featuring reduced building setbacks and encouraging street trees to preserve this "enclosed" streetscape. Ideally, pedestrian scale decorative lighting and streetscape improvements would finish the look of this district.

Permitted uses in the district include hardware, plumbing supplies, electrical supplies, drug stores and a variety of retail stores. Traditional mixed use developments consisting of commercial uses on the ground floor and residential uses on upper floors are not appropriate in the B-1 district since lot sizes are not sufficient in size to accommodate the required amount of off-street parking.

This Plan recommends revising the delineation of the Union Avenue B-1 district to follow existing rear lot lines of lots fronting on Union Avenue. The Plan also recommends reducing the northern boundary of the Union Avenue B-1 district one lot south on both the eastern and western side of Union Avenue.

Single-family residential homes are a permitted use in the B-1 District. So that the B-1 district does not revert to a district consisting primarily of single-family residential homes, this Plan recommends

revising the ordinance to only permit existing single-family homes as a principal permitted use. A specific goal of this Plan is to permit existing single-family residences to remain and to allow for reasonable expansions and improvements. However, it is intended that this district not revert to a residential district and to encourage the consolidation of lots to provide sufficient space for modern day commercial uses.

Some modifications should be made to the existing standards of the zone. The Borough should consider setting minimum lot size requirements based upon the use. For example, existing single-family structures, home professions, and home occupations should be located on lots that are at least 5,000 square feet. Non-residential uses should be on lot sizes at least 15,000 square feet and larger to provide off-street parking. The Borough should consider limiting the size of nonresidential structures to preserve the village scale of this area. Furthermore, the creation of a building floor area ratio⁴ limit should be applied to non-residential uses so that as building size increases, lot size must also be increased.

Apartment flat-style age restricted housing that is compatible with the scale and character of the district are appropriate. Automotive related uses with drive through windows are inappropriate. Smaller scale neighborhood oriented retail and personal service uses are appropriate. The area is suited for business and professional offices, home professional offices and home occupations⁵. Building conversions to a non-residential use should be carefully designed to preserve the character, scale, and features of the buildings and the streetscape. New buildings should be constructed to be architecturally consistent with existing buildings.

The second B-1 district contains a firehouse, the Florence Avenue school and a religious use. A vacant commercial building exists on the corner of Bay Avenue and Florence Avenue. Commercial uses consist of two tavern/restaurants and a delicatessen. Although three commercial uses exist in the Florence Avenue B-1 district, the character is predominantly residential.

Accordingly, neither the Union Avenue or the Florence Avenue B-1 districts have developed in accordance with the zone plan (although the Union Avenue district more closely resembles a

⁴ Floor Area Ratio – The gross floor area of all buildings on a lot divided by the lot area.

⁵ Home Occupation – Any activity carried out for gain by a resident and conducted in the resident's dwelling unit. However, this definition could be narrowed to serve any specific goals of the Borough.

business district). For this reason, this Plan recommends eliminating the Florence Avenue B-1 district.

Highway Business (B-2)

The intent of the Highway Business Commercial areas is to create commercial development opportunities that take advantage of access to Route 36. The future development of Highway Commercial uses along Route 36 should be designed with a specific geographical edge. As with other commercial districts in the Borough, lots are relatively shallow in depth for commercial development. However, despite the shallowness of depth of lots on Route 36, this Plan recommends not extending the district to Washington Avenue and Sullivan Place which may lead to the creation of through lots⁶. If commercially zoned through lots were permitted, the rear of commercial buildings that contain the mechanical and service elements would be visible from the public right-of-way and existing single-family residential homes.

The primary objective of the B-2 district is to encourage new commercial development and to improve existing commercial development along the Route 36 corridor. The existing 8,000 square foot lot size should be increased to 25,000 square feet to encourage lot consolidation and uses more appropriate for a highway corridor. In most cases, smaller lots do not provide sufficient space for off-street parking and on-site circulation. Particular attention is warranted to building design, orientation, location of parking (on the sides and rear of the building) and signage. Sign regulations should be improved to discourage pole mounted freestanding signs. Monument signs with landscaping planted at the base of signs are more appropriate. A minimum of a five (5) foot grassed strip should separate the Route 36 cartway from the front off-street parking fields. Where space permits, two to four foot landscape berms should be installed between the parking field and the cartway to diminish the view of parked cars, while not blocking signage or buildings from the right-of-way. Site plan review should encourage the sharing of parking lots of adjoining businesses where possible to limit the number of roadway openings. This form of development is a more efficient use of land and promotes a free flow of traffic.

Resort Business District (B-3)

The B-3 district is located along Front Street adjacent to Beach and Pine Streets. According to the 1985 Master Plan, the B-3 district was intended to be a resort/tourist commercial area that is

intended to maximize one of the unique resources of Union Beach, namely the Raritan Bay and the panoramic view of the New York City skyline across the Bay. The B-3 district permits retail and wholesale stores, personal service establishments, business and professional offices and banks, restaurants, bars, instructional schools, research laboratories, publication of newspapers, single-family, two-family and multi-family uses on upper floors only and federal, state and county buildings. Similar to the B-1 district, the B-3 district has not developed in accordance with the intention of the zone plan. The B-3 district currently contains four commercial uses. They include an appliance repair business, a transmission repair business, a delicatessen and a tavern/restaurant. With the exception of the Veterans of Foreign Wars (VFW) building and a small townhouse development, the area is predominantly single-family residential. This Plan recommends eliminating the B-3 district and replacing it with an R-8 Zone between Beach Street and Pine Street in accordance with the Future Land Use Map. This will achieve several goals of the Master Plan. It will eliminate the possibility of commercial buildings - and their industrial elements - backing onto Second Street. Whereas, residential units are consistent with existing developments.

Residential Office District (R-O)

The primary purpose of this zone is to allow for the conversion of existing residential structures for professional office uses while preserving the character, scale and features of the buildings and the streetscape. Any conversion of an existing residential building should be consistent with the existing architecture. The Borough should consider revising the language of the ordinance to better reflect the following provisions:

Parking - Parking areas should be screened from view of adjacent residential zones, existing residential uses and public roads by landscaping, fencing or a combination of these to create a buffer at least five (5) feet in height.

Building design and requirements - Rooftop mechanical equipment should be screened from public view by architecturally compatible materials. Ground level mechanical equipment, such as air conditioning equipment, utility boxes and meters, should be screened by landscaping, walls or fencing.

⁶ A lot which fronts upon two parallel streets, or which fronts upon two streets which do not intersect at the

Building entrances facing a street should be retained. The visual character of buildings along street frontages and entryways should be “pedestrian friendly” and porches should not be enclosed. At no time should fire escapes be permitted on the front façade of a building.

Industrial

There are two separate industrial districts within Union Beach: M-1 Light Industrial and the M-2 Heavy Industrial districts. From a land use planning perspective, industrial uses are better situated to more remote areas of the Borough that are well removed from residential areas.

Industrial Districts (M-1)

The Light Industrial (M-1) district permits the following uses:

- 1) Light manufacturing as defined
- 2) Warehousing and storage of goods and products
- 3) Wholesaling or distributing establishments, except for used automobiles
- 4) Scientific or research laboratories
- 5) Executive or administrative offices of an industrial or business concern which are not normally involved in conducting business with the general public
- 6) Federal, state, county and municipal buildings and grounds
- 7) Essential services

The M-1 district, located adjacent to Florence Avenue and the Heritage trail consists primarily of the Jersey Central Power and Light (JCP&L) facilities and the Borough’s Department of Public Works yard. The JCP&L facility is dilapidated and requires maintenance improvements. New policies and implementation strategies are needed to upgrade property maintenance and the image of the Borough. The Borough should take the lead to improve the aesthetics at the Department of Public Works yard and encourage the upgrade of the remaining portions of the M-1 district.

A portion of the M-1 district located between West Street and Ash Street consists of single-family residential properties. This Plan recommends rezoning these properties to R-8.

boundaries of the lot.

Heavy Industrial District (M-2)

The M-2 district is located at the easternmost portion of Union Beach from the Raritan Bay to Route 36. Collectively this area comprises approximately 242 acres or 20% of the Borough. Historically, IFF has been the largest employer and most significant contributor to the Borough's tax base. With the exception of two non-conforming single-family residential properties, right-of-way properties an electric substation owned by JCP&L, and a commercial use that adjoins Natco Lake, the remainder of the M-2 district is owned by IFF. The Borough recently received a Smart Future Planning Grant from the Department of Community Affairs and the Office of Smart Growth to study the M-2 district and to investigate the feasibility of creating a corporate campus on and near Block 249, Lot 1 which is approximately 115 acres in size. This Plan supports developing a new vision for this area in accordance with the Smart Growth Plan.

The IFF facility is currently identified on the New Jersey Department of Environmental Protection (NJ DEP) list of known contaminated sites. The contaminated status of the parcel may reduce many future land use options for its future reuse and sale. As part of the future visioning of this parcel, the New Jersey Department of Smart Growth, NJ DEP and the Bayshore regional planning efforts (Monmouth County), should be included as primary stakeholders. As part of this visioning process, the creation of a corporate executive campus with a waterfront walkway should be investigated.

The M-2 district permits the following uses:

1. Research and testing laboratories, such as aerodynamic, biological, chemical, dental, electronic and pharmaceutical.
2. Manufacturing of light machinery, such as carburetors and small machine parts, cash registers, sewing machines, and typewriters, calculators and other office machines.
3. Fabrication of metal products, such as baby carriages, bicycles, and other vehicles, metal foil - tin, aluminum, etc., metal furniture, musical instruments, sheet metal products, and toys.
4. Fabrication of paper products, such as bags, book binding, boxes and packaging material, office supplies and toys.
5. Fabrication of wood products, such as boats, boxes, cabinets and woodworking, furniture, and toys.

6. Food and associated industries, such as bakeries, bottling of food and beverages, food and cereal mixing and milling, food processing, food sundry manufacturing, ice cream manufacturing and manufacturing of spirituous liquor.
7. Truck terminals and the warehousing or storage of goods and products.
8. Other permissible industry, such as brush and broom manufacturing, concrete and plastic products, electrical, light and power, and other utility company installation, electronic products, farm industry - manufacturing and service, glass products manufacturing, jewelry manufacturing, including gem polishing, laundering and cleaning establishments, leather goods manufacturing, except curing, tanning and finishing of hides, motion picture exchange, pharmaceutical products manufacturing, cosmetic products manufacturing; photo finishing, pottery and ceramic products manufacturing, thread and yard manufacturing, plastics and chemical manufacturing.
9. Wholesale building materials supply yards, yards of contractors in the construction and building trades and similar operations requiring bulk storage of materials and equipment, such as building construction supplies and the equipment, vehicles and supplies of heavy equipment contractors
10. Wholesaling or distributing establishments.
11. Bulk storage of petroleum and fuels.
12. Contractors or craftsman's shop or equipment storage area, including general repair shop, except automobile dismantling or cannibalizing.
13. Federal, state, county and municipal buildings and grounds.
14. Essential services.
15. Above ground public utilities.

This Plan specifically recommends that the Borough evaluate the desirability and marketability of the existing permitted uses within the M-2 district. Particular emphasis should be placed on prohibiting uses that are incompatible with the surrounding residential land uses and character of the Borough. The Borough should consider limiting the types of uses that create significant truck traffic. Furthermore, the Borough should ensure that strict buffer requirements are applied along the perimeter of this district to mitigate any potential negative impacts associated with contiguous residential properties. The Borough should also investigate during the Smart Future Planning Grant process, potential improvements to the aesthetics and linkages (pedestrian connections) to Natco Lake and the Bayshore waterfront

OPEN SPACE

There are numerous open space areas within the Borough to acquire and improve recreation and open space in the Borough. This can be accomplished with partnering with public and quasi-public institutions to utilize and maintain recreation facilities and undeveloped land for open space or recreation. The Borough contains numerous wetland areas that may be utilized for passive recreation areas, such as trails or bird watching. There are opportunities to connect these areas with the Monmouth County Recreation Henry Hudson Trail that bisects the center of the Borough.

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) and the Monmouth County Board of Chosen Freeholders. 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 affect an annual tax levy.

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

GATEWAYS

Gateways play an important role in defining the image of the Borough. Since gateways are highly visible, they should present a positive and inviting impression. This can be accomplished through landscaping, quality of design, signage and site development. The Borough should identify specific initiatives for each gateway which improve their function as an image defining entry into the Borough. The entire waterfront of Union Beach acts as a gateway to the community. Other gateways include:

- Union Avenue/Route 36
- Florence Avenue near the DPW Yard
- Route 36 (eastern and western borders)
- Henry Hudson Trail

Since gateway areas are the first impression obtained by individuals entering Union Beach, greater attention to the design of new development and existing development is warranted.

DEVELOPMENT ALONG THE WATERFRONT

This Plan recognizes that the waterfront area as one of Union Beach' greatest assets. A key guiding principle or philosophy of this Plan is to encourage the development of land use regulations that maximize the view corridor to the waterfront. This can be incorporated in a number of ways. One example identified in this Plan is to require the layout of townhouses – in the newly proposed townhouse district – to be situated in a manner that does not create long uninterrupted rows that block waterfront views.

BAYSHORE REGIONAL STRATEGIC DEVELOPMENT AND REDEVELOPMENT PLAN

Monmouth County is in the process of preparing a strategic plan for the Bayshore Region of Monmouth County. The Plan is intended to serve two purposes:

1. To establish a set of planning alternatives to help Bayshore municipalities manage their remaining development potential, explore redevelopment opportunities and address the impacts future growth will have on infrastructure, the natural environment and the over-all quality of life; and
2. To formulate a Plan that organizes the *Corridor Petition* and the recommendations of the other Bayshore planning studies into a format suitable for regional Plan Endorsement. The ultimate objective of this study is to achieve Plan Endorsement form the New Jersey State Planning Commission.

The *Bayshore Regional Strategic Development and Redevelopment Plan* will not only create a vision for the Bayshore region, but it will also establish a vision for each municipality within the study area. The intent of the plan will be to propose a policy framework to help achieve these visions. As part of the policy framework, the plan will evaluate a set of planning alternatives to help the Bayshore guide future growth – to encourage development and redevelopment within the region while addressing the impacts that development has on mobility, infrastructure, the natural environment and the over-all quality of life. The study will examine the region's land development pattern and identify the present and future availability of growth to support economic development, transportation and public infrastructure. Using demographic, socioeconomic and land use data, the study will examine local and regional plans and create projections of various build-out scenarios.

Union Beach is actively involved in the preparation of the Bayshore Regional Strategic Development and Redevelopment Plan

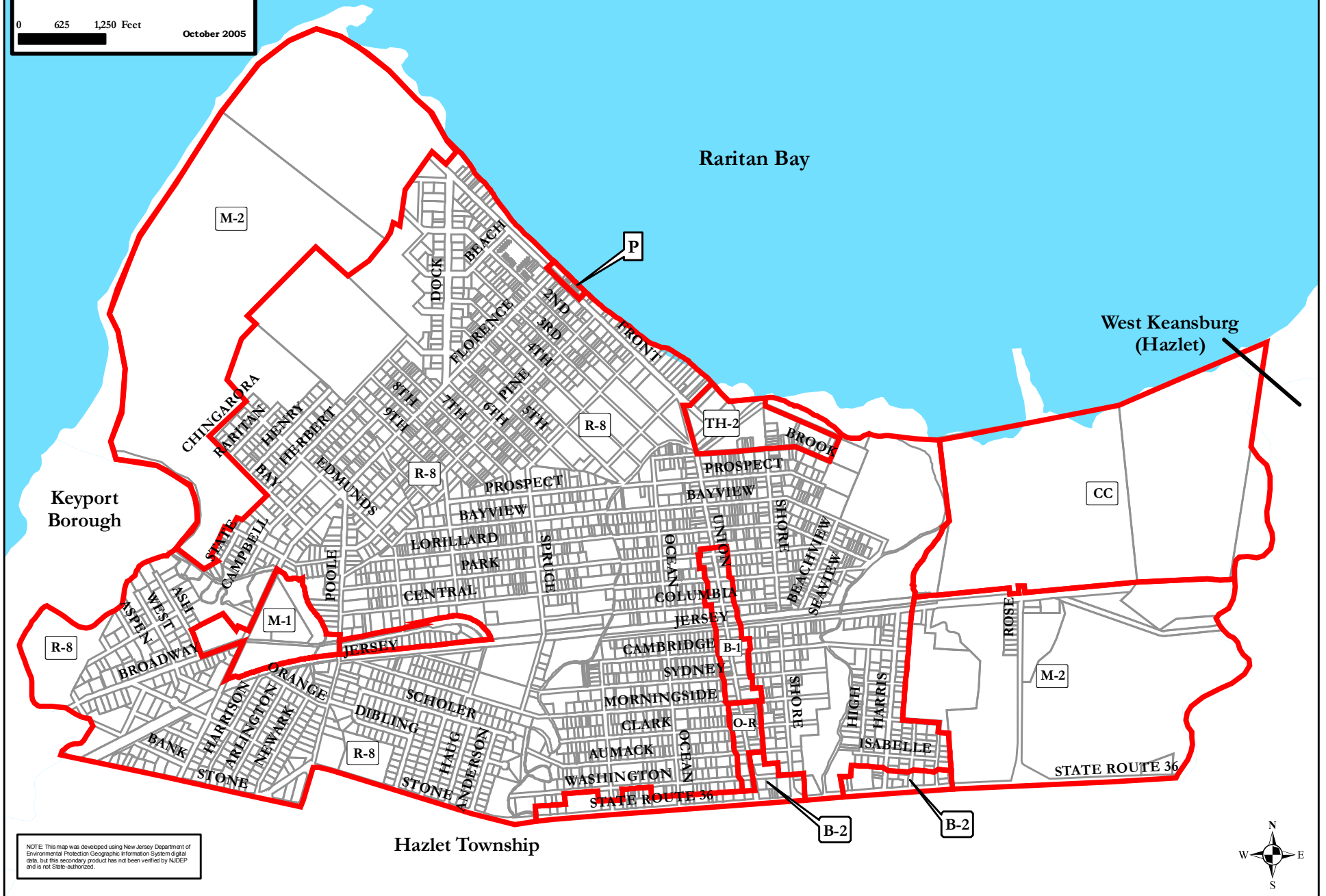
Figure LU-5
 Future Land Use
 Borough of Union Beach
 Monmouth County, New Jersey



0 625 1,250 Feet

October 2005

Future Land Use



NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

ADDITIONAL LAND USE RECOMMENDATIONS

To implement this Master Plan, the following are recommended revisions to the Borough's Land Development Ordinance to be considered by Mayor and Council.

Specific Changes Recommended for the Land Development Ordinance:

1. Rezone the O-R zone adjacent to Bayview Avenue to R-8.
2. Remove multi-family dwellings as a conditionally permitted use in the R-8 district.
3. Create a new Townhouse district in accordance with the Land Use Plan Element.
4. Eliminate the B-3 district on Front Street in accordance with the Land Use Plan.
5. Create a Public (P) district along the Raritan Bay Waterfront.
6. Rezone areas of the B-1 district to align with the rear lot line of properties. Furthermore redraw the B-1 zone district line, one parcel to the south in accordance with the Future Land Use Plan.
7. Increase the minimum lot size in the B-1 district based upon use.
8. Revise the B-2 district on Route 36 to better reflect existing land use conditions.
9. Increase lot sizes and setbacks in the B-2 district to encourage lot consolidation to encourage modern day commercial uses that require larger lot sizes.
10. Create a new land use vision for the Corporate Campus (CC) district in accordance with recommendations from the Smart Growth Grant.
11. Consider adding a floor area ratio (FAR) requirement to control the intensity of both residential and commercial properties.
12. A complete overhaul to the Borough's sign ordinance should be undertaken. Areas of emphasis include appropriate commercial signage along Union Avenue and Highway 36.
13. The zoning ordinance should be amended to indicate densities in all residential zoning districts.
14. Update the fee schedule for application and review fees consistent with neighboring communities.
15. Create a new ordinance and user friendly manual that clearly articulates guidelines for raising housing out of the floodplain. Such an ordinance should provide a purpose statement and indicate when a variance is required.
16. Permit family daycare homes in all districts.

17. The maintenance of residential and commercial property in a few areas of the Borough is substandard. New policies and implementation strategies are needed to upgrade property maintenance and the image of the Borough. This process should begin as a municipal effort at the Department of Public Works yard and continue to the remaining portions of the Borough.
18. Revise the ordinance to limit the number of consecutive attached townhouses. Create specific regulations for townhouses which:
 - Maximize views to the waterfront from the public realm;
 - Are constructed at a height that is compatible with surrounding properties; and
 - Are architecturally compatible with surrounding properties.
19. Create an ordinance to grandfather existing single-family residential units in every zoning district.

The following are general land use recommendations:

Undersized Lots

As indicated in the Land Use Issues section of this Plan, numerous undersized lots are currently mapped on the Borough of Union Beach Tax Maps. The Borough recently adopted an ordinance to merge contiguous undersized lots under the same ownership. From a practical matter, unless this lot consolidation occurs with the tax assessor's records and the corresponding tax maps, there is potential for merged undersized lots to be sold. If this occurs, greater potential exists for new single-family housing to be constructed on undersized lots. This Plan specifically recommends that all existing undersized lots in common ownership be consolidated. The Borough's tax maps should be updated accordingly.

Residential Site Improvement Standards (RSIS)

The Residential Site Improvement Standards were adopted by New Jersey in January 1997 and revised February 7, 2005. RSIS governs any site improvements carried out in connection with a residential development application. According to the Statute, the standards are intended to create uniform development guidelines and ensure predictability. The rules supersede municipal standards for residential development and took effect on June 3, 1997.

It is recommended that the amended Land Development Ordinance be updated to be consistent with RSIS.

Group Homes

In January 1998, the Municipal Land Use Law was amended to address group homes in residential districts. N.J.S.A. 40:55D-66.1 states that:

“Community residences for the developmentally disabled, community shelters for victims of domestic violence, community residences for the terminally ill and community residences for persons with head injuries shall be a permitted use in all residential districts of a municipality, and the requirements therefore shall be the same as for single-family dwelling units located within such districts.”

This change should be incorporated into the Zoning and Land Development Ordinance.

Religious Institutions

In September 2000, the Religious Land Use and Institutionalized Persons Act was approved in the U.S. House and Senate and subsequently signed by the President. The law substantially changes the extent of local review a community has on development applications of religious institutions. The Borough should continually monitor the outcome(s) of this new Law.

Child Care

Amendments to the Municipal Land Use Law govern the regulation of childcare and day-care facilities. Pursuant to the MLUL, these uses are permitted in any non-residential district. The Borough’s Zoning and Land Development Ordinance should be reviewed for consistency with the Statute.

HOUSING PLAN ELEMENT

INTRODUCTION

Union Beach Borough is located in the Bay Shore Region of Monmouth County and on the Raritan Bay. The Borough has a land area of 1.8 square miles. In addition to the Borough's existing land use regulations, the Coastal Area Facility Review Act (CAFRA), places additional regulations over the Borough. The Borough maintains both public water and sanitary sewer throughout its limits. The New Jersey State Development and Redevelopment Plan (State Plan) identifies the Borough as 81% Metropolitan Planning Area (PA1) and as 19% Environmental Sensitive Planning Area (PA5).

The Housing Plan Element for Union Beach Borough is based upon the requirements of the Fair Housing Act (N.J.S.A. 52:27D-310), the Municipal Land Use Law (N.J.S.A. 40:55D-28), the New Jersey Council on Affordable Housing (COAH) Procedural Rules (N.J.A.C. 5:95) and COAH Substantive Rules (N.J.A.C. 5:94). The COAH rules became effective on December 20, 2004. The Housing Plan Element is designed to achieve a goal of access to a variety of housing to meet municipal and regional housing needs with particular attention to low and moderate income household housing needs.

The New Jersey Council on Affordable Housing (COAH) is the state agency responsible for identifying housing regions and estimating low and moderate income housing needs for the State and allocating these needs to municipalities. COAH has designated six Housing Regions in the State. Union Beach Borough is located in the East Central Housing region that includes Ocean, Monmouth and Mercer Counties.

The Council on Affordable Housing developed the "municipal fair share obligation:" methodology comprised of "Rehabilitation Share," "Prior Round Obligation" and "Growth Share" to determine housing need. Rehabilitation Share consists of existing housing units with physical deficiencies such as heating, plumbing, roofing, etc. that are occupied by low and moderate income households using data from the 2000 U.S. Census. Based on previous methodologies, Prior Round Obligation incorporates the new construction obligation from the 1987 to 1999 time period that a municipality would be required to address for consideration of substantive certification. Growth share is a projection of low and moderate income housing needs based on residential and non-residential development and growth, which is projected to occur in the housing region for the time period of 1999 to 2014. The housing obligations

are generated by a residential and nonresidential ratio: for every eight market-rate units built, one affordable housing unit must be constructed and for 25 new jobs created (measured by the square footage of a building), one affordable housing unit must be constructed.

Based on COAH's Procedural and Substantive Rules, Union Beach Borough has a cumulative fair share housing obligation, or "precredited need," for the period 1987 to 1999 of 91 low and moderate income housing units. The obligation consists of a 4-unit Rehabilitation Share, which encompasses the existing substandard housing units occupied by low and moderate income households, and an 87-unit Prior Round Obligation, which is the need for new affordable housing units in the Borough generated between 1987 and 1999 (COAH's "first" and "second" round). Given the lack of vacant unconstrained developable land in the Borough, the Union Beach is eligible to receive a vacant land adjustment, which reduces its new construction obligation for COAH's first and second rounds to zero. The lack of vacant developable land is described in the Borough's Land Use Plan Element.

In accordance with COAH's recently adopted "third-round" regulations (N.J.A.C 5:94-1 et seq.), Union Beach also is required to address any new affordable housing obligation generated from new residential and nonresidential growth in the Borough occurring between January 1, 2004, and December 31, 2013. The Borough's third-round growth share obligation is estimated based on a projection of new residential and nonresidential growth based on historic development trends and anticipated new development activity in the Borough during this period. The total number of affordable housing units generated from these projections totals an obligation of seven (7) units.

Taking into account the prior round obligation, the rehabilitation share and the growth share, Union Beach Borough is obligated to ensure a total of eleven (11) affordable housing units under COAH's Third Round Substantive Rules.

HOUSING STOCK CHARACTERISTICS

Housing stock characteristics include the number and type of housing units, occupancy/household characteristics, age (the year the structure was built), condition of units, purchase or rental value of units and units affordable to low and moderate income housing (Tables H-1 to H-5).

Number, Type and Ownership of Housing Units

According to the 2000 U.S. Census, Union Beach Borough contained 2,229 housing units; an increase of 149 units or 7% from the 1990 U.S. Census which reported 2,080 housing units. Owner occupied dwelling units make the majority of the housing units in the Borough; accounting 84% of 2,143 occupied dwelling units. Less than twenty (20) percent is renter-occupied.

Occupancy/Household Characteristics

According to the 2000 Census, Union Beach Borough had a total of 2,143 households and 9 seasonal, recreational or occasional use housing units. The Borough consists primarily of single-family detached dwelling units, about 2% are single-family detached and less than 1% are multi-family housing units.

Householders 65 years or older accounted for 331 individuals in Union Beach Borough in 2000.

Age of Housing

The Union Beach Borough housing stock consists mainly of housing built prior to 1970, with the years 1940-1959 being the most productive. Union Beach Borough's median age for housing stock is 1954, with 50 percent of the housing stock constructed before and 50 percent constructed after that date. Twenty-three (23) percent of housing units were constructed in 1939 or earlier. Between 1940 and 1959, close to one thousand housing units were constructed; accounting for 44.1 percent of the current housing stock. Between 1960 and 1969, housing production waned to 215 units or 9.6 percent of the housing stock. Between 1970 and 1979, 131 housing units or 5.9 percent of the total was constructed and the lowest record of housing production. Between 1980 and 1989, 217 units or 9.7 percent of housing units were constructed, a slight increase of housing starts and similar to the trend of the 1960-1969 time period. From 1990 to 2000, 162 units were constructed accounting for 7.3 percent of the total. The potential for new housing starts in the Borough will be limited, however, due to the lack of

vacant developable land in the Borough. Any new residential development will primarily be the re-use of existing properties and infill housing.

Condition of Units

According to the 2000 Census, the housing stock in Union Beach Borough has a low number of substandard units and indicates that Union Beach has no units lacking complete plumbing facilities and eighteen (18) units lacking complete kitchen facilities.

Owner Occupied Housing Value and Rental Rates

The 2000 median value of the owner occupied housing units in Union Beach Borough was \$132,800. Of the total owner occupied units housing values, less than 2 percent were greater than \$300,000 (31 units) and 4% had a value of between \$200,000 and \$299,999 (72 units). The majority of housing values lie between \$100,000 and \$199,000, 22.2 percent had a value of \$150,000 and \$199,000 (399 units) and over 58.4 percent had a value between \$100,000 and \$149,000 (1,052 units). Less than 15 percent of the housing value is \$50,000 or less (246 units).

The 2000 median gross monthly rent was \$780 for rental housing units in Union Beach Borough. Of the 338 renter occupied units reporting monthly rental rates, most renters paid \$500 to \$999 in rent. Monthly rent greater than \$1,500 accounted for none of the units in the Borough and less than 15 percent paid rent between \$1,000 and \$1,499 (48 units). Rent between \$750 and \$999 accounted for 38.8 percent (131 units) and the rental rate between \$500 and \$479 was 34.3 percent (116 units). Less than 5 percent of monthly rent is between \$300 and \$499 (15 units), no monthly rent reported between \$200 to \$250 and less than 5 percent for rent less than \$200 (10 units). Of the monthly rent totals 5.3 percent had a no cash rent (18 units).

TABLE H-1
HOUSING CHARACTERISTICS 2000
UNION BEACH BOROUGH

	Number	Percent of Total
I. HOUSING UNITS		
Number of units	2,229	N/A
Occupied Housing Units	2,143	N/A
Number of units (1990)	2,080	N/A
Vacant Housing Units	86	N/A
Vacancy Rate	3.9%	N/A
 II. OCCUPANCY/HOUSEHOLD CHARACTERISTICS		
Number of Households	2,143	N/A
Average Household Size	3.09	N/A
Family Household	1,732	80.8%
Non-Family Household	415	19.4%
Householders 65 +	331	N/A
Seasonal, Recreational or Occasional Use	9	N/A
Owner Occupied	1,800	84.0%
Renter Occupied	343	16.0%
 III. YEAR STRUCTURE BUILT		
1999 - March 2000	0	0.0%
1995 - 1998	104	4.7%
1990 - 1994	58	2.6%
1980 - 1989	217	9.7%
1970 - 1979	131	5.9%
1960 - 1969	215	9.6%
1940 - 1959	983	44.1%
1939 or earlier	521	23.4%
Total	2,229	100.0%
 IV. CONDITION OF UNITS*		
Lacking complete plumbing facilities	0	N/A
Lacking complete kitchen facilities	18	N/A

2000 & 1990 U.S. Census data

TABLE H-1 (continued)
HOUSING CHARACTERISTICS - 2000
UNION BEACH BOROUGH

	Number	Percent of Total
V. HOUSING VALUE - (Owner Occupied Units)*		
\$300,000 and up	31	1.7%
\$200,000 - \$299,999	72	4.0%
\$150,000 - \$199,999	399	22.2%
\$100,000 - \$149,999	1,052	58.4%
\$50,000 - \$99,999	246	13.7%
\$0 - \$50,000	0	0.0%
Total	1,800	100.0%
Median Value	\$132,800	
VI. MONTHLY RENTS - (Rental Occupied Units)*		
\$1,500 or more	0	0.0%
\$1,000 - \$1,499	48	14.2%
\$750 - \$999	131	38.8%
\$500 - \$749	116	34.3%
\$300 - \$499	15	4.4%
\$200 - \$299	0	0.0%
Less than \$200	10	3.0%
No Cash Rent	18	5.3%
Total	338	100.0%
Median Monthly Rent	\$780	

*2000 U.S. Census data

SOURCE: U.S Bureau of Census 2000

COMPILED BY: T & M ASSOCIATES

Affordability to Low and Moderate Income Households

COAH regulations determine that “affordable” housing is based on the percent of income needed to provide housing. For owner occupied units, this maximum is set at 28 percent of household income, while for rental occupied units the maximum is set at 30 percent. To determine the affordability of an area and calculate the affordable housing needs, the 2000 U.S. Census data and the COAH 2005 Regional Income Limit may be utilized.

The 2000 Census reports that median household income in 1999 dollars is \$59,946. According to the COAH 2005 Regional Income Limits set for Monmouth County (Region 4), a single individual would be eligible for affordable housing benefits under the following conditions: median household income at \$55,635, moderate household income at \$44,508, low household income at \$27,818 and very low \$16,691.⁷ COAH’s Regional Limits are determined annually and are divided by the number of individuals in a household from 1 person to 8 persons. To be eligible for affordable housing benefits, individuals/households must be below the income limit set for the region.

Using the 2005 Regional Limit as a cutoff point, there are over 36.4 percent of the Borough’s households with incomes less than \$50,000 dollars (782 households). Of these, 9.2 percent have incomes between \$40,000 to \$49,999 (197 households), 12.2 percent have incomes between \$25,000 to \$39,999 (261 households) and 15.1 percent have incomes less than \$25,000 (324 households).

Owner Occupied Housing

According to the 2000 Census, 62.1 percent of the owner-occupied households spend less than 30 percent of their income for housing costs (Table H-2).

⁷Moderate-income households are defined as households earning between 50 percent and 80 percent of area median income. Low-income household are classified as earning less than 50 percent of area median income and very-low income household earn less than 30 percent of area median income.

Table H-2 Monthly Owner Costs As A Percentage of Household Income, 1999 Union Beach Borough		
	<i>Number</i>	<i>Percent</i>
Less than 15%	288	17.0%
15% to 19.9%	251	14.8%
20% to 24.9%	292	17.2%
25% to 29.9%	222	13.1%
30% or more	642	37.9%
Total	1,695	100.0%
Source: U.S. Census, 2000. (1.1% of households were not computed) STF-3 Sample Data		

Renter Occupied Housing

Table H-3 indicates the gross rent paid by a tenant as a percentage of household income. According to the 2000 Census, 51.5 percent of rental occupied units can be defined as affordable to low or moderate income individuals. There are 40.2 percent renters that exceed the affordable housing threshold set by COAH. One indicator of substandard housing conditions are the total number of bedrooms in rental arrangements. In the Borough, the total number of bedroom in rental apartments reports there are 44 one (1) bedroom, 184 two (2) bedrooms and 115 three (3) or greater bedrooms in the Borough.

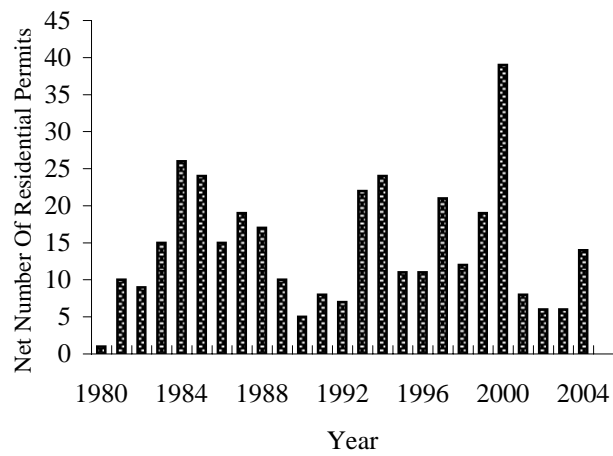
Table H-3 Gross Rent As A Percentage of Household Income, 1999 Union Beach Borough		
	<i>Number</i>	<i>Percent</i>
Less than 15%	78	23.1%
15% to 19.9%	38	11.2%
20% to 24.9%	30	8.9%
25% to 29.9%	28	8.3%
30% or more	136	40.2%
Total	338	100.0%
Source: U.S. Census, 2000. (8.3% of households were not computed) STF-3 Sample Data		

Housing Construction: 1980 – 2004

Table H-4 lists the number of residential building permits reported to the New Jersey Department of Labor annually from 1980 through 2004. A total of 359 residential building permits were authorized during this time period, with an average of 14 building permits authorized per year. Authorization for housing construction appears to be cyclic and mirror the State high residential growth periods of the 1980s and early 1990s. During the first peak from 1983 to 1989, 126 building permits or 35.1 percent were approved and 159 building permits were authorized during the second wave from 1993 to 2000. In 2004, there were 14 building permits issued.

**TABLE H-4
RESIDENTIAL CONSTRUCTION
UNION BEACH BOROUGH**

Year	Building Permits
1980	1
1981	10
1982	9
1983	15
1984	26
1985	24
1986	15
1987	19
1988	17
1989	10
1990	5
1991	8
1992	7
1993	22
1994	24
1995	11
1996	11
1997	21
1998	12
1999	19
2000	39
2001	8
2002	6
2003	6
2004	14
TOTAL	359



*SOURCE: New Jersey Department of Labor, Building Permit Sumaries.
COMPILED BY: T&M ASSOCIATES.*

PROJECTIONS OF HOUSING STOCK

The total number of year-round housing units in Union Beach increased marginally between 1980 (2,078 units) and 1990 (2,080 units) and increased by +7.1 percent from 1990 to 2000 (2,229 units). Linear regression analysis based upon historical growth trends from 1980 to 2000 would indicate continued growth in the Borough housing stock ranging from 14 to 15 new units per year. However, based on a lack of available unconstrained vacant land in the Borough, new housing construction in Union Beach only marginally increases in the future. Based on the COAH Third Round methodology there will be an increase of 60 additional units from the time period of January 1, 2004 to December 1, 2013. This number takes into account both the residential and non-residential growth projections that will be discussed in detail in the section on Determination of Pre-credited Present and Prospective Fair Share Need.

DEMOGRAPHIC CHARACTERISTICS

Table H-5 indicates total population by age cohort and income level by household for Union Beach Borough.

Population

According to the 2000 Census, there are 6,156 individuals in Union Beach. Of this total, 8.3 percent are classified as pre-school age 0-4 years (510 individuals). School age children ages 5-19 accounted for 23 percent of the total (1,145 individuals). Working age 20-64 year old persons accounted for the majority of the Borough population (3,658 individuals). Seniors aged 65 and older accounted for 9.3 percent of the Borough population (573 individuals).

Income Level

In 1999 dollars, per capita income was \$20,973, while the median household income was \$59,946. In terms of the income distribution, 15.1 percent of the households reported income of less than \$25,000 (324 households), while 7.2 percent reported income between \$25,000 and \$34,999 (154 households). There were 14.1 percent of households reporting incomes between \$35,000 and \$49,999 (304 households) and 27.2 percent reporting incomes between \$50,000 and \$74,999 (584 households). A total of 19.5 percent reported incomes of \$75,000 - \$99,999 (418 households) and 13.6 percent reported incomes of between \$100,000 and \$149,999 (291 households). In the higher income range, 2.94 percent reported \$150,000 or greater household incomes (72 households).

**TABLE H-5
DEMOGRAPHIC CHARACTERISTICS - 2000
UNION BEACH BOROUGH**

2000 Census

	Number	Percent of Total
POPULATION AGE		
Preschool (0 - 4 Yrs.)	510	8.3%
School Age (5 - 19 Yrs.)	1,415	23.0%
Working Age (20 - 64 Yrs.)	3,658	59.4%
Seniors 65 +	573	9.3%
Total	6,156	100.0%

SOURCE: U.S Bureau of Census -2000

COMPILED BY: T & M ASSOCIATES

2000 Census

1999 INCOME LEVEL (HOUSEHOLDS)

Less than \$10,000	82	3.8%
\$10,000 - \$14,999	73	3.4%
\$15,000 - \$24,999	169	7.9%
\$25,000 - \$34,999	154	7.2%
\$35,000 - \$49,999	304	14.2%
\$50,000 - \$74,999	584	27.2%
\$75,000 - \$99,999	418	19.5%
\$100,000 - \$149,999	291	13.6%
\$150,000 - \$199,999	63	2.9%
\$200,000 or more	9	0.4%
Total	2,147	100.00%

1999 Median household income = \$59,946

1999 Per capita income = \$20,973

SOURCE: U.S Bureau of Census 2000 Summary Tape File 3.

COMPILED BY: T & M ASSOCIATES

EXISTING AND FUTURE EMPLOYMENT CHARACTERISTICS

According to Table H-6, a loss of - 108 jobs were reported during the 1994 to 1998 time period, which represents a decrease of 11.1 percent compared to a 9.1 percent increase at the County level. Most of this decline can be attributed to the closure of the IFF manufacturing facility. The population to jobs ratio in 2000 ranged from 2.5 to 4.9 for the three counties in the Union Beach housing region. Union Beach Borough's population to job ratio is 7.7:1. In 2003, the New Jersey Department of Labor reported a total of 935 private sector jobs in the Borough (Table H-7).

In the future, employment growth in Union Beach will be primarily affected by the future development and expansion of the International Flowers and Fragrance (IFF) office and industrial uses located within the Borough, and especially its previously closed manufacturing facility located on the Raritan Bay. This site and the adjoining Natco Lake area are currently being evaluated with a New Jersey Smart Future Planning Grant. The purpose of the planning study is to develop a new vision for the future development and preservation of the area.

Given the impact of the IFF site, it is difficult to project future employment growth simply on past trends. In its 1998 Cross Acceptance Report, the Monmouth County Planning Board forecasted jobs in Union Beach for the years 2005 and 2020. At that time, the county projected that total employment in the Borough would be 400 jobs in 2005 and 500 jobs in 2020. As shown in Table H-7, there appears to be an inconsistency with the 2003 New Jersey Department of Labor data and the 2005 figure. However, it is important to note, that 444 out of the 935 reported jobs (2003) consisted of suppressed data.⁸ It appears that the jobs associated with suppressed data may not have been calculated within the County projections.

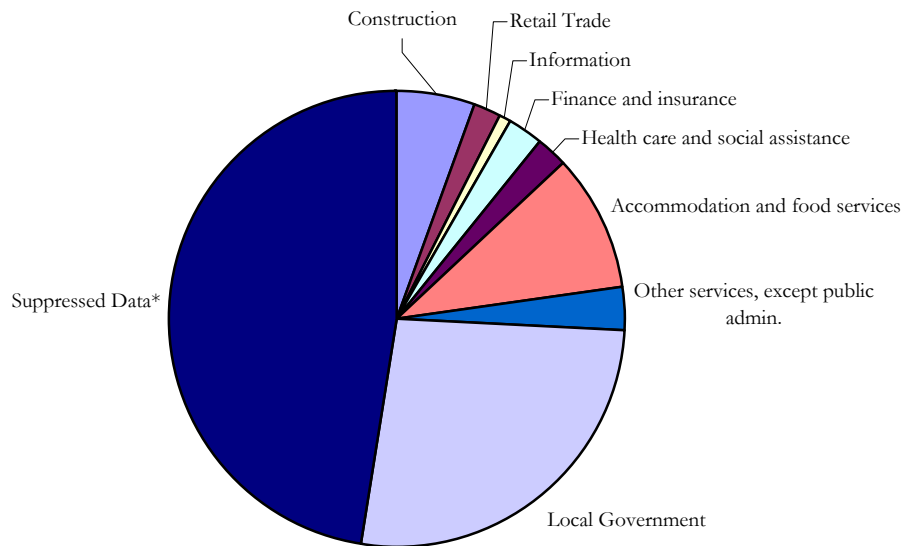
In general, job growth has been relatively stagnant in the Borough over the last decade. Excepting a potential for the re-use of the former IFF manufacturing facility, this trend is anticipated to continue in the future.

⁸ Suppressed data – industries with few units or where one employer is a significant percentage of employment or wages of the industry.

Table H-6						
Private Sector Covered Employment, 1994 to 1999						
Union Beach Borough and Monmouth County						
	Union Beach Borough			Monmouth County		
	Number	Difference		Number	Difference	
Year	of Jobs**	Number	Percent	of Jobs**	Number	Percent
1994	971	---	---	175,765	---	---
1995	989	+18	+1.8%	179,137	+3,372	1.9%
1996	898	-(91)	-9.2%	181,804	+2,667	1.5%
1997	1,237	+337	+37.7%	184,804	+3,000	1.6%
1998	673	-(564)	-(45.6)%	188,836	+4,032	2.2%
1999	863	+190	28.2%	191,804	+2,968	1.6%
Employment Change, 1994-1999		-(108)	-(11.1)%		16,039	+9.1%
Population to Jobs Ratio, 1999-2000						
Area	2000 Population*	1999 Covered Employment **		Population to Jobs		
Borough of Union Beach	6,649	863		7.7		
Ocean County	510,916	103,708		4.9		
Monmouth County	615,301	191,804		3.2		
Mercer County	350,761	140,556		2.5		
<i>Source:</i> * U.S. Census, 2000. ** N.J. Department of Labor, Private Sector Covered Jobs (3 rd Quarter, 1994-1999).						

**TABLE H-7
EMPLOYMENT CHARACTERISTICS - 2003
UNION BEACH BOROUGH**

Broad Industry Division	Number	Percent of Total
Construction	51	5.5%
Retail Trade	19	2.0%
Information	7	0.7%
Finance and insurance	23	2.5%
Health care and social assistance	23	2.5%
Accommodation and food services	89	9.5%
Other services, except public admin.	29	3.1%
Local Government	250	26.7%
Suppressed Data*	444	47.5%
TOTAL	935	100.0%



* Data have been suppressed for industries with few units or where one employer is a significant percentage of employment or wages of the industry

SOURCE: New Jersey Department of Labor - Municipal annual reports: New Jersey employment & wages, annual municipality report by sector (NAICS based): 2003. Number of jobs represents the average for the year.

COMPILED BY: T & M ASSOCIATES

DETERMINATION OF PRE-CREDITED PRESENT AND PROSPECTIVE FAIR SHARE NEED

Union Beach Borough was allocated a fair share housing precredited need of 91 low and moderate income housing units as calculated by the New Jersey Council on Affordable Housing and presented in Appendix C entitled *1987-1999 Prior Obligation Numbers & 2004-2014 Rehabilitation Share* dated July 13, 2004 (N.J.A.C. 5:94-1 et seq.). The methodology established by COAH allocates present and prospective housing needs for all municipalities within New Jersey. As discussed previously, the Borough is not obligated to address the Prior Obligations of 87-units because of the lack of vacant unconstrained developable land. The remaining Rehabilitation Share of 4-units will need to be addressed by the Borough by bring these units to code and ensuring that affordable housing controls are in place.

This Housing Plan addresses a preliminary recognition of its “growth share” obligation for the period January 1, 2004, and December 31, 2014. This projection is based on the projected residential and non-residential growth as calculated by the New Jersey Transportation Planning Authority (NJTPA), the Metropolitan Planning Organization responsible for Union Beach Borough’s population, household and employment projections⁹.

In regards to projected residential growth there will be an additional 60 new households (H-8). This number is derived from the difference of number of households projected from the year 2005 at 2,180 households and the year 2015 at 2,240. The result serves as the basis for number of affordable housing units that will be attributed to residential growth in the Borough. Therefore the NJTPA’s residential growth projection of 60 households would generate the need for 7 affordable units. The affordable units are derived from the COAH rules that state for every eight new market rate units, or one unit per 9 total units, one affordable housing unit obligation is generated.

Table H-8				
NJTPA Residential Growth Projection				
2015 NJTPA Household	-	2005 NJTPA Household	=	Household Growth
2,240	-	2,180	=	60

⁹The NJTPA projections were obtained from the COAH web site on August 17, 2005. As noted on the COAH website, NJTPA provided to COAH household projections. For the purpose of determining Union Beach Borough’s growth share, population projections were not provided as they are not necessary to convert population to household growth.

For non-residential projected growth there will be no net growth (H-9). This number attributes the percent change in employment growth in the Borough from the year 2005 and 2015, both of which are 360 individuals. These results also serve as the basis for number of affordable housing units that will be attributed to non-residential growth in the Borough. Non-residential growth will generate no growth share obligation.

Table H-9				
NJTPA Non-Residential Growth Projection				
2015 NJTPA Employment	-	2005 NJTPA Employment	=	Employment Change
360	-	360	=	0

Union Beach’s fair share obligation totals **eleven (11)** affordable housing units as follows:

1. **Prior Round Obligation (1987-1999): Zero.** The prior obligation of 87 affordable units is zero because of the insufficient unconstrained vacant land in the Borough.
2. **Rehabilitation Share (2004): Four (4) Units.** This number reflects information obtained from the 2000 U.S. Census for deficient housing occupied by low-and moderate-income households.
3. **Growth Share (2004-2014): Seven (7) Units.** This number reflects both projected residential and non-residential growth. Union Beach projected household growth accounts for an obligation of seven (7) affordable housing units for residential growth and zero (0) for non-residential growth.

Please note that the fair share number calculated above is preliminary; and requires that the Borough review the ten-year projections at the third, fifth and seventh year respectively. In addition, the growth projections may change based on changes to zoning that may increase or decrease the development capacity of a particular zoned area. Likewise, the Borough must monitor employment changes that may occur on the former IFF site. These factors may change the Borough’s fair share obligation.

HOUSING POLICY

Union Beach Borough encourages development of housing that will be compatible with existing residential neighborhoods, with environmental resources and constraints, with the availability of infrastructure, and with the need to maintain adequate levels of public services. Housing development within Union Beach occurs within established residential areas as infill development in the form of single-family residential at a density of 5.8 units per acre, and townhouses ranging from 6 to 9 units per acre. The Borough anticipates continuing the existing scale of development consistent with the State Development and Redevelopment Plan.

The following sections address Union Beach Borough's cumulative affordable housing obligation for the period 1987 to 2014 in the form of a compliance plan, which identifies the various housing obligation requirements established by COAH.

Targeted Goals

1. Preserve established residential character wherever possible by preventing the intrusion of incompatible commercial and industrial uses into residential neighborhoods and promoting the rehabilitation of substandard units.
2. Provide a balance of housing options to meet the needs of all residents including low and moderate income housing and market rate housing.
3. Encourage residential rehabilitation to improve substandard units and preserve neighborhood stability.
4. Encourage the development of housing that is affordable to younger couples and families seeking to remain in, or move to, the Borough.
5. Promote the development of senior citizen housing that enables older residents to “age in place” including independent living, assisted living and congregate care housing.
6. Enforce the property maintenance code to improve the aesthetics and image of the Borough.

7. Review the possibility of adopting a “growth share” ordinance to capture opportunities for new affordable housing and address the Borough’s growth share obligation as new development occurs.

MUNICIPAL STORMWATER MANAGEMENT PLAN ELEMENT

BOROUGH OF UNION BEACH
MONMOUTH COUNTY, NEW JERSEY

PREPARED FOR:

BOROUGH OF UNION BEACH PLANNING BOARD

ADOPTED MARCH 30, 2005

PREPARED BY:

EDWARD G. BROBERG, P.E., P.P
BOROUGH OF UNION BEACH ENGINEER

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FEBRUARY 2005

INTRODUCTION

As required by the Municipal Stormwater Regulations (N.J.A.C. 7:14A-25), the Borough of Union Beach has developed this Municipal Stormwater Management Plan (plan) to outline their approach to addressing the impacts resulting from stormwater related issues associated with future development, redevelopment, and land use changes. This plan addresses groundwater recharge, stormwater quantity, and stormwater quality impacts through the incorporation of stormwater design and performance standards for new development and redevelopment projects that disturb one or more acres of land and/or result in more than one quarter acre of additional impervious coverage. The standards are intended to minimize negative or adverse impacts of stormwater runoff such as decreased water quality, increased water quantity and reduction of groundwater recharge that provides base flow to the Borough's receiving bodies of water. In addition to minimizing these impacts, this plan provides long term operation and maintenance measures for existing and proposed stormwater management facilities.

This plan provides recommendations for ordinance modifications in order to expedite the implementation of stormwater management strategies. The plan also includes mitigation strategies to permit the Borough to grant variances or exemptions from proposed design and performance standards set forth by the Municipal Stormwater Regulations (N.J.A.C. 7:8-5.5).

Goals and Objectives

The goals of this plan are:

1. Reduce flood damage, including damage to life and property;
2. Minimize, to the extent practical, any increase in stormwater runoff from any new development or redevelopment;
3. Reduce soil erosion from any development, redevelopment or construction project;
4. Seek to assure the adequacy of existing and proposed culverts and bridges, and other in-stream structures;
5. Maintain groundwater recharge;
6. Prevent, to the greatest extent feasible, an increase in non-point pollution;
7. Maintain the integrity of stream channels for their biological function, as well as for drainage;
8. Minimize pollutants in stormwater runoff from new and existing development to restore, enhance, and maintain the chemical, physical, and biological integrity of the waters of the state, to protect public health, to safeguard fish and aquatic life and scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial, and other uses of water;
9. Protect public safety through the proper design and operation of stormwater basins and best management practices.
10. Increase public awareness of stormwater management through public education.

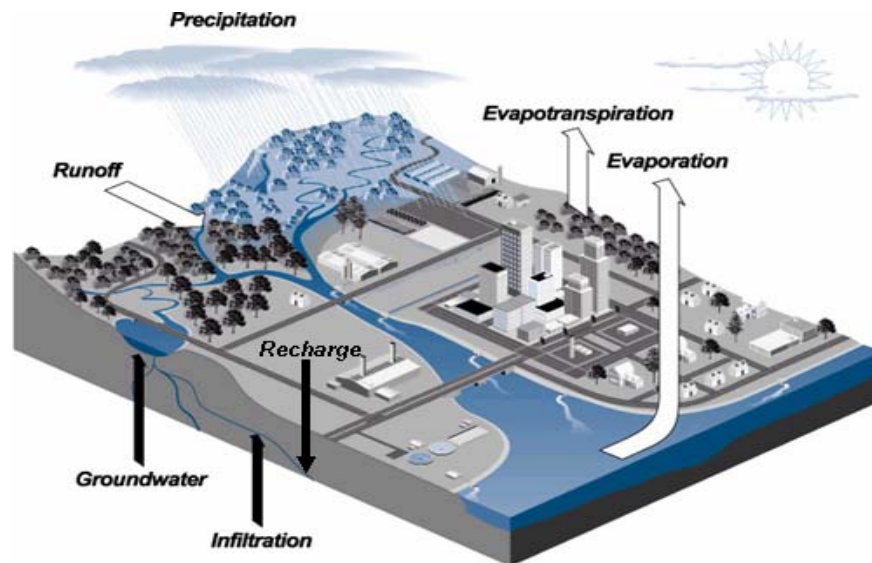
To achieve these goals, the plan outlines specific stormwater design and performance standards for new development and proposes stormwater management controls for addressing impacts from existing developments. Preventive and corrective maintenance strategies are also included to ensure the long-term effectiveness of stormwater management facilities and the plan outlines safety standards for stormwater infrastructure to be implemented to protect public safety.

STORMWATER DISCUSSION

Hydrologic Cycle

The hydrologic cycle or water cycle, as shown in Figure 1, is the continuous circulation of water between the ocean, atmosphere, and the land. The driving force of this natural cycle is the sun. Water, stored in oceans, depressions, streams, rivers, water bodies, vegetation and even land surfaces, continuously evaporates due to solar energy. This water vapor then condenses in the atmosphere to form clouds and fog. After water condenses, it precipitates, usually in the form of rain or snow, onto land surfaces and water bodies. Precipitation falling on land surfaces is often intercepted by vegetation. Plants and trees transpire water vapor back into the atmosphere, as well as aid in the infiltration of water into the soil. The vaporization of water through transpiration and evaporation is called evapo-transpiration. Infiltrated water percolates through the soil as groundwater, while surface water flows overland. Water flows across or below the surface to reach major water bodies and eventually flows to the Earth's seas and oceans. This constant process of evapo-transpiration, condensation, precipitation, and infiltration comprises the hydrologic cycle.

Figure 1: Hydrologic Cycle



Definitions:

- Runoff – water that travels over the ground surface to a channel
- Groundwater flow – movement of water through the subsurface
- Infiltration – penetration of water through the ground surface
- Recharge – water that reaches saturated zone

Source: Kern River Connections <http://www.creativille.org/kernriver/watershed.htm>

Impacts of Stormwater

Prior to any land development, native vegetation often intercepts precipitation directly or absorbs infiltrated runoff into their roots. Development often replaces native vegetation with lawns or impervious cover, such as pavement or structures, thereby reducing the amount of evapo-transpiration and infiltration. Re-grading and clearing of property disturbs the natural topography of rises and depressions that can naturally capture rainwater and allow for infiltration and evaporation. Construction activities often compact soil, thereby decreasing its permeability or ability to infiltrate stormwater. Development activities also generally increase the volume of stormwater runoff from a given site.

Connected impervious surfaces and storm sewers (such as roof gutters emptying into paved parking lots that drain into a storm sewer) allow the runoff to be transported downstream more rapidly than natural areas. This shortens travel time and increases the rainfall-runoff response of the drainage area, causing downstream waterways to peak higher and quicker than natural areas, a situation that can cause or exacerbate downstream flooding, erosion, and sedimentation in stream channels. Furthermore, connected impervious surfaces do not allow pollutants to be filtered, or for infiltration and groundwater recharge to occur, prior to reaching the receiving waters. Increase volume, combined with reduced base flows, results in a greater fluctuation between normal and storm flows causing greater channel erosion. Additionally, reduced base flows, increase fluctuation, and soil erosion can affect the downstream hydrology of the watershed, impacting ecological integrity.

Water quantity impacts, combined with land development, often adversely impact stormwater quality. Impervious surfaces collect pollutants from the atmosphere, animal waste, fertilizers and pesticides, as well as pollutants from motor vehicles. Pollutants such as hydrocarbons, metals, suspended solids, pathogens, and organic and nitrogen containing compounds, collect and concentrate on impervious surfaces. During storm events, these pollutants are washed directly into the municipal storm sewer systems. In addition to chemical and biological pollution, thermal pollution can occur from water collected or stored on impervious surfaces or in stormwater impoundments, which have been heated by the sun. Thermal pollution can affect aquatic habitats, adversely impacting cold water fish. Removal of shade trees and stabilizing vegetation from stream banks also contributes to thermal pollution.

As towns and cities develop from rural agricultural communities, the landscape is altered in dramatic ways. Both residential and non-residential development on former vacant lots can have a great impact on the hydrologic cycle for the specific site. Localized impacts to the hydrologic cycle will ultimately impact the hydrologic cycle of the entire watershed encompassing that development site.

Proper stormwater management will help mitigate the negative impact of land development and its effects on stormwater. This plan outlines the Borough's proposal to improve stormwater quality, decrease stormwater quantity, and increase groundwater recharge. By managing stormwater, the Borough will improve the quality of aquatic ecosystems and restore some of the natural balance to the environment.

Background

The Borough of Union Beach is a small 1.8 square mile municipality located in the northern part of Monmouth County. Union Beach is surrounded by the Raritan Bay to the north, East Creek to the east, Hazlet Township to the south and Chingarora Creek to the west. Additionally, Flat Creek and East Creek flow through the Borough. All of the creeks within the Borough flow north and discharge in the Raritan Bay. Figure 2 delineates the Borough boundaries on a United States Geological Survey (USGS) quadrangle map. As shown on this map, the topography of Union Beach can be characterized by low, flat terrain, with elevations ranging between zero feet NGVD (Sea Level) to approximately 20 feet NGVD in the extreme southeastern and southwestern portions of the Borough. Wide stretches of swampy marshlands are located along the various creeks in the Borough.

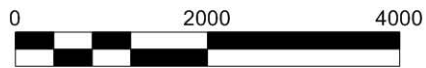
Demographics and Land Use

Union Beach is an established community as shown on Table 1 below. The Borough’s population, according to the 2000 US Census, is 6,649 and has remained fairly stable for the past forty years. This is evident in the fact the Borough has only grown at an average rate of which is less than the county and state growth rates. Additional information regarding the Borough’s historical population growth can be found in the *Borough of Union Beach Master Plan*, last revised September 1985.

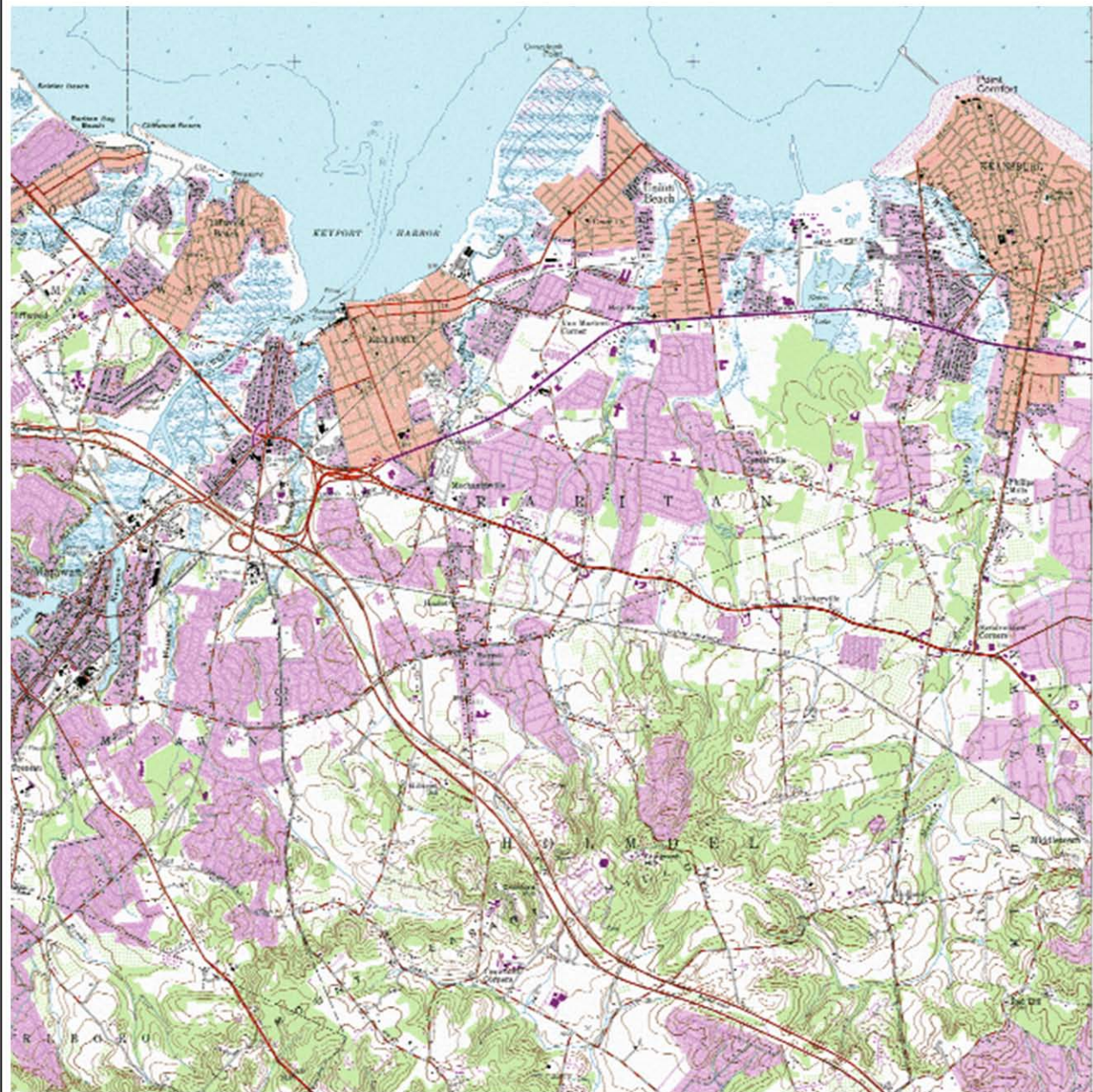
Table 1: Historical Population Growth 1930 – 2000

<i>Year</i>	<i>Borough of Union Beach</i>		<i>Monmouth County</i>		<i>New Jersey</i>	
	<i>Total Population</i>	<i>Average Annual Growth Rate Over the Prior 10-year Period</i>	<i>Total Population</i>	<i>Average Annual Growth Rate Over the Prior 10-year Period</i>	<i>Total Population</i>	<i>Average Annual Growth Rate Over the Prior 10-year Period</i>
1930	1,893	–	147,209	–	4,041,334	2.8%
1940	2,076	0.9%	161,238	0.9%	4,160,165	0.3%
1950	3,636	5.8%	225,327	4.0%	4,835,329	1.6%
1960	5,862	4.9%	334,401	4.8%	6,066,782	2.6%
1970	6,472	1.0%	461,849	3.8%	7,171,112	1.8%
1980	6,354	-0.2%	503,173	0.9%	7,364,823	0.3%
1990	6,156	-0.3%	553,124	1.0%	7,730,118	0.5%
2000	6,649	0.8%	615,305	1.1%	8,414,350	0.9%

Figure 2: Topographic Map
Borough of Union Beach
Monmouth County, New Jersey



Source: U.S.G.S. Keyport (1977), NJ
Quadrangle Maps



Union Beach has 2,143 residential dwellings, 45 commercial properties and 8 industrial properties. As shown in Table 2 below, approximately 96% of the properties are occupied.

Table 2: General Housing Characteristics

	1990		2000		Change
	Number	Percent	Number	Percent	Number
Occupancy Status					
Total Housing Units	2,080	100	2,229	100	149
Occupied Housing Units	1,978	95.1	2,143	96.1	165
Vacant Housing Units	102	4.9	86	3.9	- 16
Tenure					
Occupied Housing Units	1,978	100	2,143	100	156
Owner- Occupied Housing Units	1,700	85.5	1,800	84	100
Renter- Occupied Housing Units	287	14.5	343	16	56
Population	6,156	100	6,649	100	493
Households	1,978	100	2,143	100	156
Family Household	1,619	81.9	1,722	80.4	103
Non-Family Household	359	18.2	421	19.6	62
Persons/ Household	3.11	-	3.10	-	- 0.1

Source: 1990, 2000 US Census

It should be noted though that according to the September 1985 *Borough of Union Beach Master Plan*, the Borough is nearly fully developed and has very little land available for development that is not impacted by environmental constraints. Most development in the Borough is redevelopment, rehabilitation of older housing stock or infill development in established neighborhoods. This is demonstrated in Figure 3 which shows the existing land use within the Borough and Figure 4 which shows the current zoning throughout the Borough.

Table 3: Existing Land Use

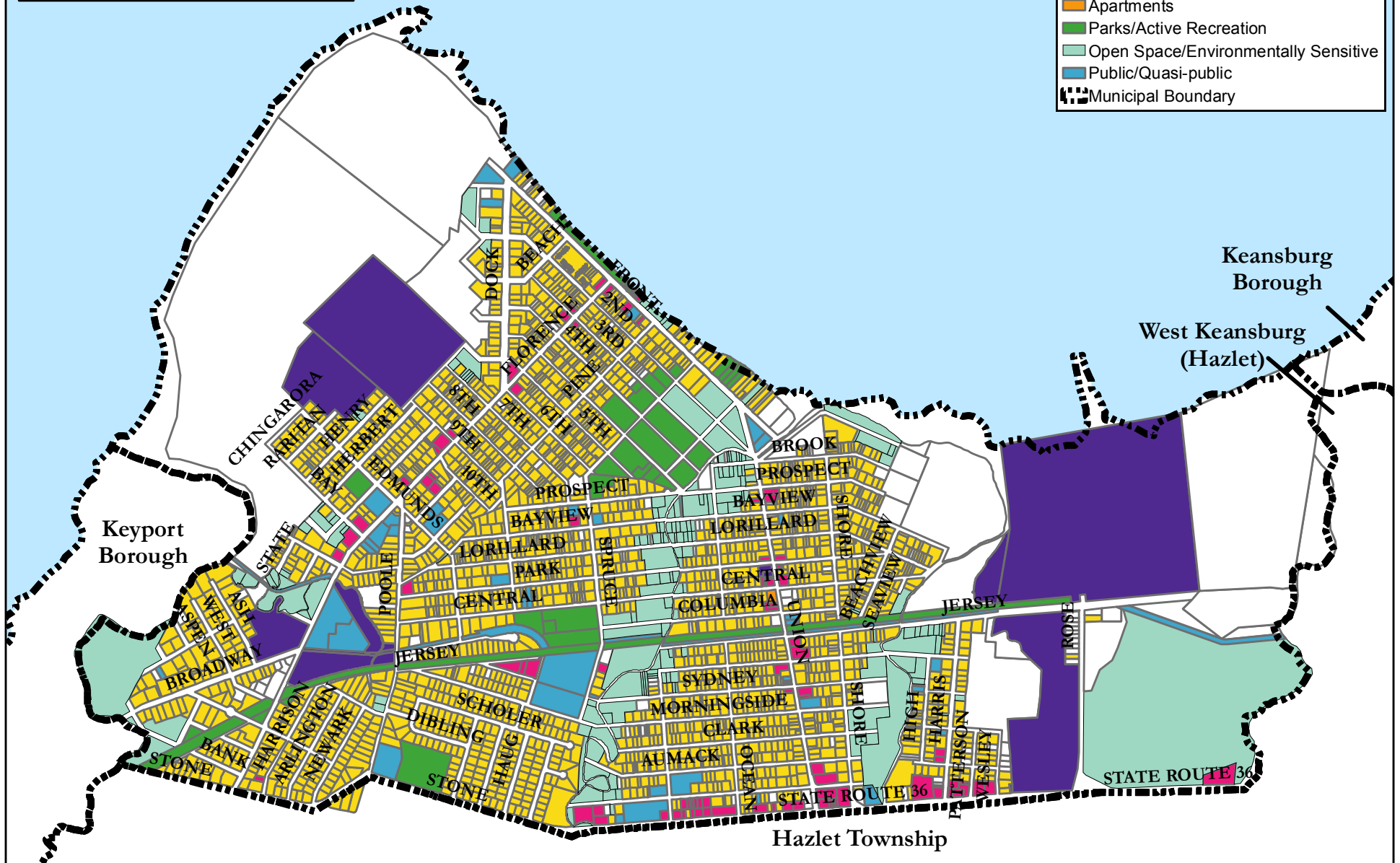
	<i>2000</i>	<i>2000</i>
<i>Land Use</i>	<i>Acres</i>	<i>Percent</i>
Residential	353	36.3%
Vacant land	305	26.1%
Commercial	18	1.6%
Industrial	134	11.4%
Active Recreation	41	3.5%
Public Environmentally Constrained Open Space	132	11.3%
Public/Quasi-public	32	2.8%
Rights-of-way/Riparian lands	156	13.3%
Total	1,171	100%

Source: Borough GIS and T&M Associates Field Survey

Figure 3: Existing Land Use
 Borough of Union Beach
 Monmouth County, New Jersey

N.T.S.

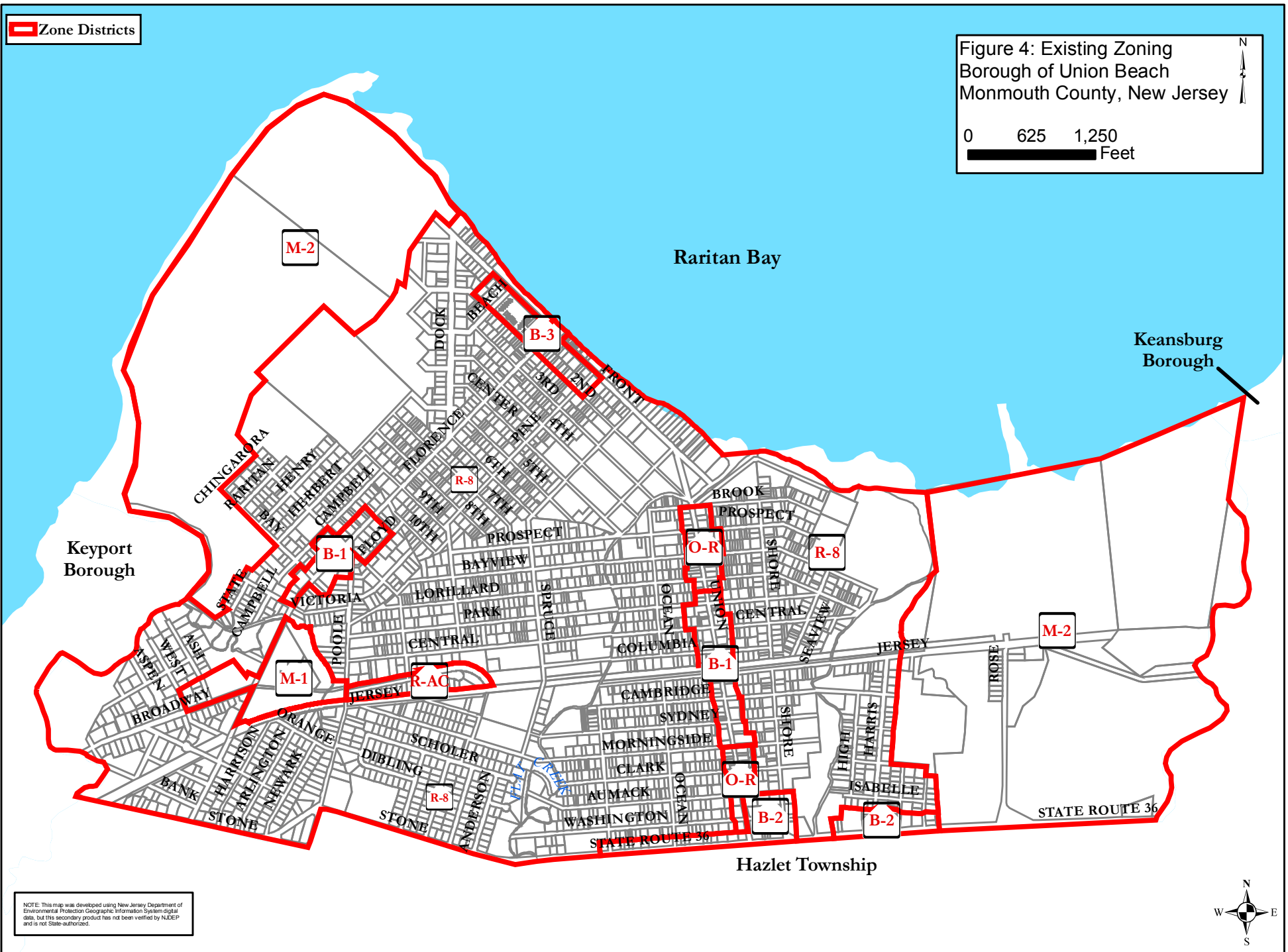

-  Municipal Boundary
-  Vacant Land
-  Residential
-  Commercial
-  Industrial
-  Apartments
-  Parks/Active Recreation
-  Open Space/Environmentally Sensitive
-  Public/Quasi-public
-  Municipal Boundary



 Zone Districts

Figure 4: Existing Zoning
Borough of Union Beach
Monmouth County, New Jersey

0 625 1,250
Feet



NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State authorized.



Water Bodies

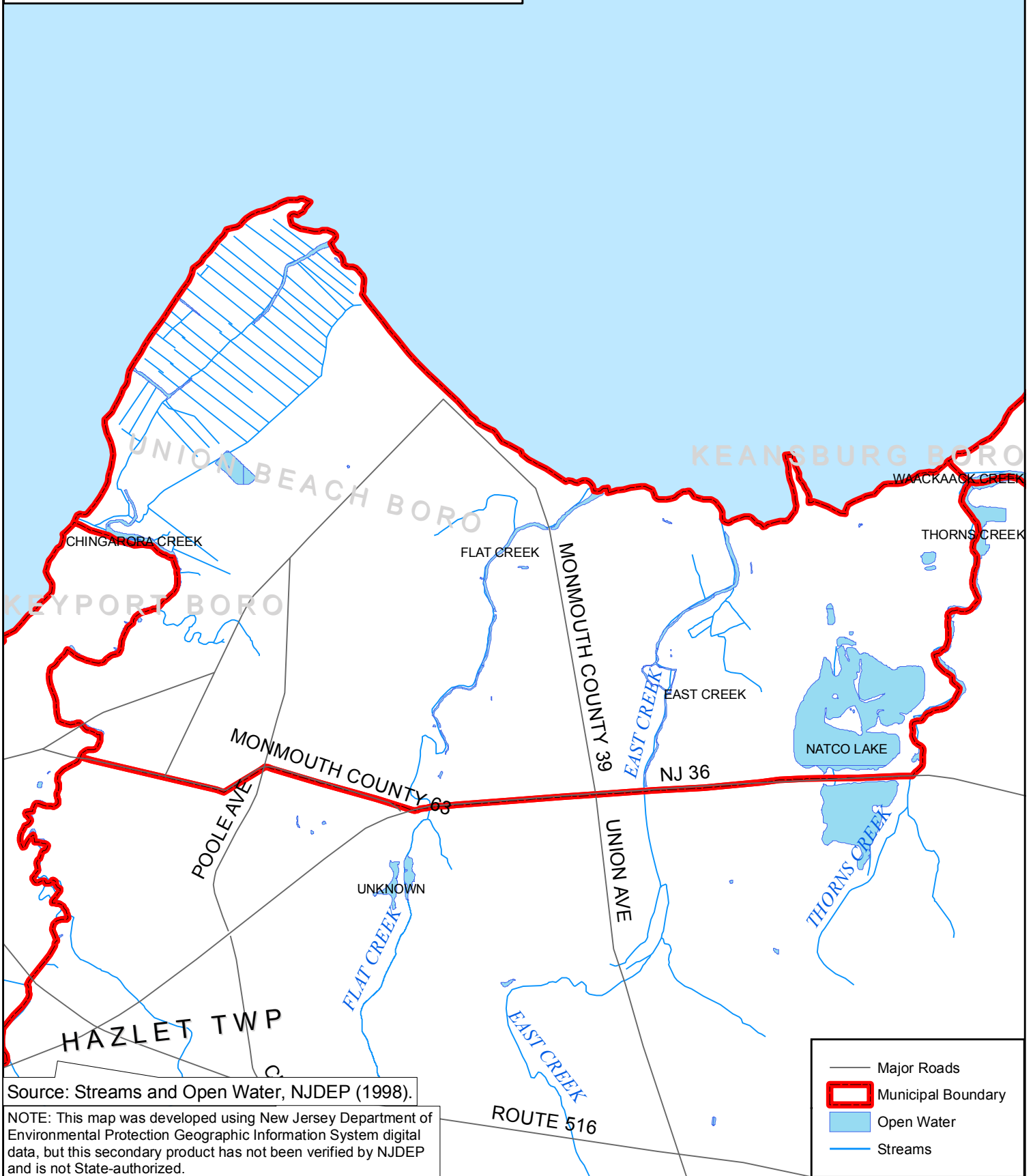
As stated above, the Borough's water bodies include Flat Creek, East Creek, and Chingarora Creek. All creeks within the Borough flow north and discharge directly into the Raritan Bay. Figure 5 illustrates the water bodies of the Borough.

The Borough's drainage system consists of approximately 38 outfalls, approximately 6.5 miles of storm sewer pipe ranging between 12 inches and 48 inches in diameter and approximately 400 inlets. The approximate location of the outfalls and inlets are shown in Figure 6. The Borough does not have any other municipally owned drainage facilities. One of the outfalls discharges directly into the Raritan Bay, one discharges into Natco Lake, six discharge into East Creek, approximately 16 discharge into Flat Creek, approximately 10 discharge into the marsh area along the western edge of the Borough and four discharge into the marshland along the eastern edge of the Borough. The flat grade of the streams and the low relief of the adjacent area make the Borough vulnerable to flooding during periods of heavy rain. Severe thunderstorm activity causes the creeks to overtop and spread their floodwaters over the broad floodplain. Most residential and commercial development is located between the low-lying marshland and is below 16 feet NGVD. A majority of the buildings are located within the 100-year floodplain. In fact, extensive development has occurred up to the very edge of the surrounding wetlands.

Figure 5: Borough Waterbodies
 Borough of Union Beach
 Monmouth County, New Jersey



0 0.125 0.25 0.5 0.75 1 Miles



Source: Streams and Open Water, NJDEP (1998).

NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

	Major Roads
	Municipal Boundary
	Open Water
	Streams

Water Quality

The Ambient Biomonitoring Network (AMNET) was established by the New Jersey Department of Environmental Protection (NJDEP) to monitor and document the health of New Jersey’s waterways. AMNET currently has 820 sites in five drainage basins that it monitors for benthic macro-invertebrates on a five-year cycle. Waterways are scored based on the data to generate the New Jersey Impairment Score (NJIS) and then categorized as severely impaired, moderately impaired, and non-impaired. The NJIS is based on biometrics and benthic macro-invertebrate health (<http://www.state.nj.us/dep/wmm/bfbm/>).

In addition to the biological health, chemical data is gathered by the NJDEP, the Monmouth County Health Department, and other organizations, and is used to determine the health of waterways. The impaired waterways are summarized on the New Jersey 2004 Integrated List of Water Bodies. This list is then broken down into five sublists based on priority. The water bodies on Sublist 5 are classified as being the most severely impaired or threatened, whereas the water bodies on Sublist 1 are the least threatened or impaired. A summary of the impaired Borough’s water bodies is present in Table 4 below.

Table 4: Union Beach Borough Impaired Water Bodies

<i>Stream Location</i>	<i>ID Number</i>	<i>Sublist Number</i>	<i>Priority For Sublist 5 Water Bodies</i>	<i>Impairment(s)</i>	<i>Data Source</i>
Chingarora Creek	R6436	5 5	High Medium	Fecal Coliform Dissolved Oxygen	Monmouth County Health Department and NJDEP Coastal Monitoring
Flat Creek	AN0457	5	Low	Benthic Macro-invertebrates	NJDEP AMNET

Sources: <http://www.state.nj.us/dep/wmm/bfbm/> Sub-List, New Jersey’s 2004 Integrated List of Water Bodies, dated June 22, 2004

This water quality data is used by NJDEP to develop Total Daily Maximum Loads (TMDL). A TMDL is the quantity of a pollutant that can enter a water body without exceeding water quality standards or interfering with the ability to use the water body for its designated usage. Point and non-point pollution, surface water withdrawals and natural background levels are included in the determination of a TMDL, as required by Section 303(d) of the Clean Water Act. Point source pollution includes, but is not limited to, NJPDES permitted discharges, while non-point source pollution can include stormwater runoff from agricultural lands or impervious surfaces. TMDLs determine the allowable load from each source, with a factor of safety for the pollutant entering the water body. TMDLs can be used to prevent further deterioration of a water body, or to improve the current water quality. Currently, there are no established stormwater TMDLs in Union Beach. As TMDLs are developed, the Borough will revise its plan to be consistent with any adopted TMDL in

the future. In addition, the Borough should encourage future monitoring of the Borough's water bodies and mitigation as necessary.

Water Quantity

Stormwater runoff often causes water quantity issues. In Union Beach, however, stormwater only exacerbates existing tidal flooding issues. There are several streets where stormwater compounds the tidal flooding, including the low-lying streets of Florence Avenue, Union Avenue and Front Street. The Borough is working with the state and county to undertake short-term strategies to address these problem areas.

Groundwater Recharge

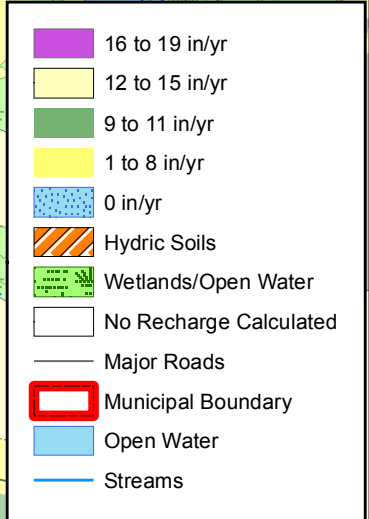
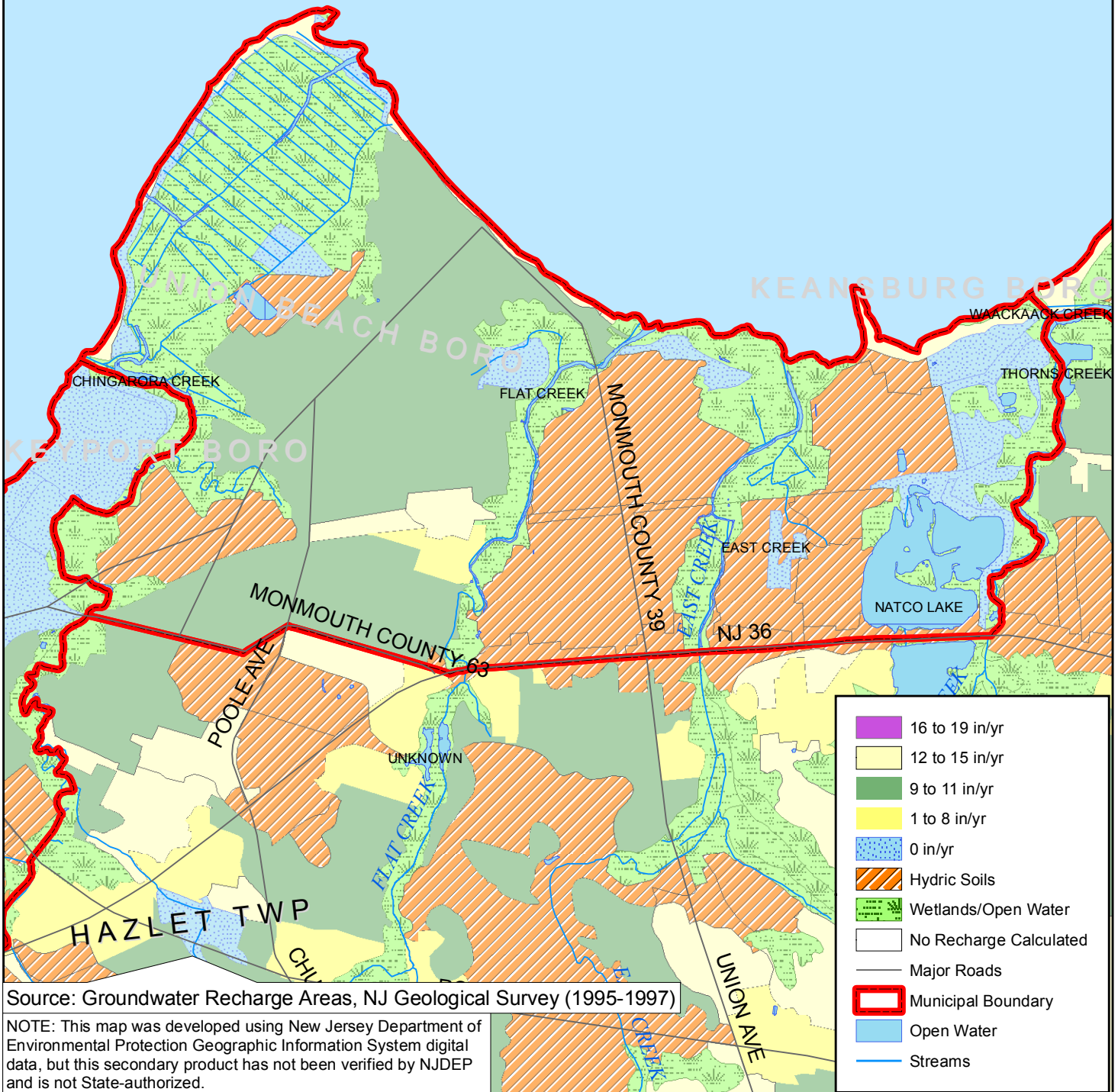
Increases in development of vacant sites have increased impervious surface areas. Impervious surface areas are portions of the development site covered with either structure or pavement that prevents the underlying soil from absorbing rainwater. Instead of entering the soil, rainwater from rooftops and pavement flows onto the adjacent ground, where it is partially absorbed into the ground (depending upon hydraulic soil classifications) or into drainage facilities and streams. The greater the amount of impervious surface, the greater volume of stormwater runoff that drains away from a given site. Greater volumes of stormwater can result in high water elevations in some locations along streams and can exacerbate streambed erosion, and potentially cause downstream siltation. These dynamics alter the floodplain and have negative impacts on both the stream and river ecosystems. A map showing groundwater recharge areas within the Borough is located in Figure 7. This map was developed using the New Jersey Department of Environmental Protection Geographic Information System digital data and the New Jersey Geological Survey data prepared in 1995-1997.

The Borough's water source is not directly affected by the reduction of groundwater recharge, since the Borough does not have any existing wells. However, Shorelands Water Company has two (2) wells at their facility on Union Avenue in adjacent Hazlet Township. Since the movement of groundwater refreshes aquifers, stormwater infiltration and groundwater recharge are very important for maintaining the aquifer. Figure 8 illustrates the location of the wellhead protection areas for the Shorelands Water Company facilities in Hazlet Township.

Figure 7: Groundwater Recharge Areas
 Borough of Union Beach
 Monmouth County, New Jersey



0 0.125 0.25 0.5 0.75 1 Miles



Source: Groundwater Recharge Areas, NJ Geological Survey (1995-1997)

NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

Figure 8: Wellhead Protection Areas
 Borough of Union Beach
 Monmouth County, New Jersey

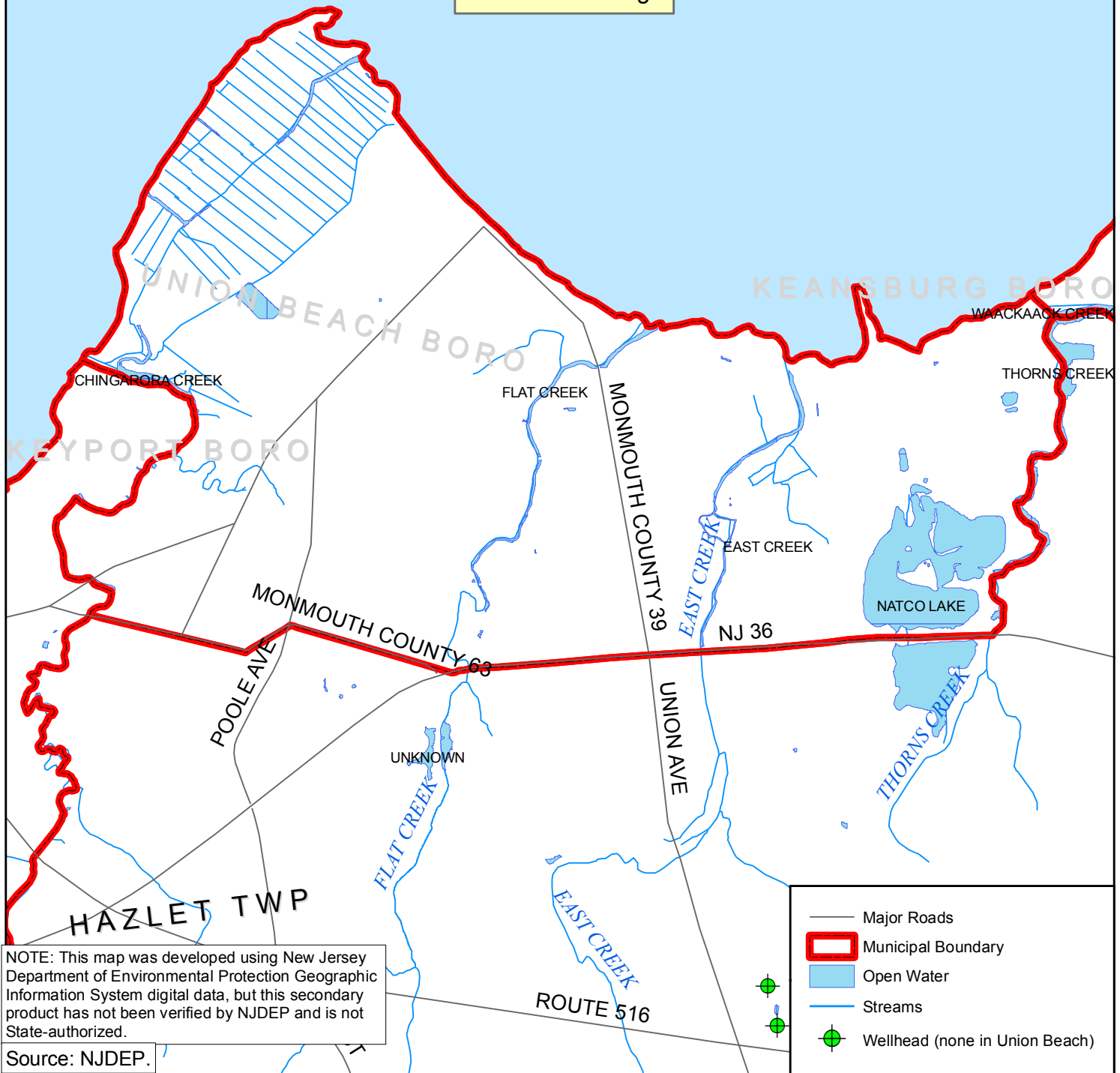
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0 0.125 0.25 0.5 0.75 1 Miles



No Public Wells
 within the Borough



NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

Source: NJDEP.

- Major Roads
- Municipal Boundary
- Open Water
- Streams
- Wellhead (none in Union Beach)

Design and Performance Standards

The Borough should adopt applicable design and performance standards for stormwater management measures as presented in N.J.A.C. 7:8-5 to reduce the negative impact of stormwater runoff on water quality and quantity, and loss of groundwater recharge in receiving water bodies. The section of this plan, entitled Stormwater Management Strategies, indicates actions which are appropriate for various types of development in Union Beach. Ultimately, design and performance standards will be created to contain the necessary language to maintain stormwater management measures consistent with the applicable stormwater management rules, N.J.A.C. 7:8-5.8 - Maintenance Requirements. This includes language for safety standards consistent with N.J.A.C. 7:8-6 - Safety Standards for Stormwater Management Basins. Ordinances must be submitted to the Monmouth County Planning Board for review and approval within 12 months of adoption of this plan.

A number of structural and nonstructural strategies require water to be retained for long periods of time. These requirements may increase the promulgation of mosquito breeding habitats. New development and redevelopment activities should be coordinated with the Monmouth County Mosquito Extermination Commission so that proposed structural and nonstructural strategies are properly maintained.

Proper construction, inspection and maintenance are critical components for the successful performance of a stormwater management system. During construction, Borough personnel will observe construction of the project to ensure that the appropriate stormwater management measures are constructed and that they function as designed.

The Borough is presently preparing a Stormwater Pollution Prevention Plan (SPPP) to address inspection and maintenance for existing stormwater infrastructures throughout the Borough. Also included in the SPPP plan is the development of a Local Public Education Program to educate property owners on methods to reduce non-point stormwater pollution such as proper waste disposal, solids and floatable controls, fertilizer and pesticide use. New development and redevelopment projects will be required to develop and submit a detailed operation and maintenance plan for each stormwater management strategy implemented in accordance with N.J.A.C. 7:8 - 5.8. Recommendations for proper maintenance procedures are available in the NJDEP's *Best Management Practices (BMPs) Manual*. Copies of the maintenance plan(s) must be filed with the Borough Department of Public Works.

Borough personnel will perform periodic inspections during the first two years of operation and after significant storms to ensure the system is functioning properly and to identify maintenance needs, if any. After this, annual checks will be done to identify any additional maintenance needs required. This may include clearing of blockages from inlets and/or outlet structures, removal of unhealthy vegetation or accumulated debris/materials.

Borough ordinances should indicate that the inspection of stormwater systems is permissible on private property, provided the necessary easements are in place, upon giving reasonable notice. Ordinances should also indicate a timeframe for maintenance procedures to occur upon receiving notice from the Borough that maintenance is required.

Plan Consistency

Regional Stormwater Management Plans

Currently, there are no adopted Regional Stormwater Management Plans developed for water bodies located “within” the Borough’s boundaries. This plan will be updated to be consistent with any Regional Stormwater Management Plans that are established in the future. Union Beach will take part in the development of any proposed Regional Stormwater Management Plans that may affect water bodies within or adjacent to the Borough.

Total Maximum Daily Loads (TMDL)

None of the Borough waterbodies currently have established a non-point source pollution TMDL. This plan will be updated to be consistent with any future stormwater TMDL established by the NJDEP.

Residential Site Improvement Standards (RSIS)

This plan is consistent with regulations established under the Residential Site Improvement Standards (RSIS) or N.J.A.C. 5:21, and will be updated to remain consistent with any future updates of RSIS. Additionally, the Borough will use the latest update of RSIS during its reviews of residential area development for stormwater management.

Soil Conservation

The Borough’s Stormwater Management Control Ordinance requires that all new development and redevelopment projects comply with the Soil Erosion and Sediment Control Standards of New Jersey. In cooperation with the Freehold Soil Conservation District, Borough personnel will observe on-site soil erosion and sediment control measures as part of the construction site inspections.

Stormwater Management Strategies

The Borough has reviewed its Master Plan (1985) and its pertinent development ordinances for consistency with the new stormwater regulations. Based on its review, the Board finds that the following sections must be modified in order to incorporate the NJDEP's nonstructural strategies for stormwater management. It should be noted that the Borough is fully developed and minimal "major development"¹⁰ is anticipated.

- ❑ **Section 13-5.13: Preserving Natural Features:** This Section requires natural features such as wetlands and floodplains be preserved to the extent feasible. This Section should be updated to require areas within 300 feet of a Category-1, unless approval is obtained from the NJDEP to permit a reduction of the buffer width to 150 feet.

- ❑ **Section 13-6.5.a: Minor Subdivisions Required Documents:** This Section outlines the items that must be submitted to the Board for review and approval prior to the application being deemed completed and a public hearing being scheduled. This Section should be updated to also require the applicant to submit a completed copy of the NJDEP Best Management Practices Manual Low Impact Development Checklist as part of any site plan or subdivision application. This Section should also be revised to allow the inclusion of the "Design and Performance Standards" requirements outlined in this plan.

- ❑ **Section 13-6.6.a: Preliminary Plat of a Major Subdivision Required Documents:** This Section outlines the items that must be submitted to the Board for review and approval prior to the application being deemed completed and a public hearing being scheduled. This Section should be updated to also require the applicant to submit a completed copy of the NJDEP Best Management Practices Manual Low Impact Development Checklist as part of a major subdivision application. This Section should also be revised to allow the inclusion of the "Design and Performance Standards" requirements outlined in this plan.

- ❑ **Section 13-6.7.a: Preliminary Plat of a Site Plan Required Documents:** This Section outlines the items that must be submitted to the Board for review and approval prior to the application being deemed completed and a public hearing being scheduled. This Section should be updated to also require the applicant to submit a completed copy of the NJDEP Best Management Practices Manual

¹⁰ Major Development – means any development that provides for ultimately disturbing one or more acres of land or increases impervious surface by one-quarter acre or more. Disturbance for the purpose of this rule is the placement of impervious surface or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation. Projects undertaken by any government agency which otherwise meet the definition of 'major development' but which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered "major development."

Low Impact Development Checklist as part of any minor or preliminary site plan application. This Section should also be revised to allow the inclusion of the "Design and Performance Standards" requirements outlined in this plan.

- ❑ **Section 13-6.8.a: Final Plat of a Major Subdivision Required Documents:** This Section outlines the items that must be submitted to the Board for review and approval prior to the application being deemed completed and a public hearing being scheduled. This Section should be updated to also require the applicant to submit a completed copy of the NJDEP Best Management Practices Manual Low Impact Development Checklist as part of any final subdivision application. This Section should also be revised to allow the inclusion of the "Design and Performance Standards" requirements outlined in this plan.
- ❑ **Section 13-6.9.a: Final Plat of a Major Site Plan Required Documents:** This Section outlines the items that must be submitted to the Board for review and approval prior to the application being deemed completed and a public hearing being scheduled. This Section should be updated to also require the applicant to submit a completed copy of the NJDEP Best Management Practices Manual Low Impact Development Checklist as part of any final site plan application. This Section should also be revised to allow the inclusion of the "Design and Performance Standards" requirements outlined in this plan.
- ❑ **Section 13-7.3: Off-Tract Improvements:** This Section details the requirement for off-tract improvements. Language should be added to require stormwater management and drainage improvements to conform to the "Design and Safety Standards" of this plan.
- ❑ **Section 13-7.7: Site Maintenance During Construction:** This Section outlines the developer's responsibility to maintain the sites during construction. This Section should be updated to require developers to also comply with the Soil Erosion and Sediment Control Standards of New Jersey.
- ❑ **Section 13-8.1 General Improvement Standards:** This Section outlines the Standard Specification and Construction Details requirement. This Section should be amended to require developers to also comply with the Soil Erosion and Sediment Control Standards of New Jersey, the New Jersey Stormwater Best Management Practices, the standards set forth in the plan and the stormwater control ordinances required by N.J.A.C. 7:8.

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- ❑ **Section 13-8.4: Buffer Areas, Screening, Landscaping and Shade Trees:** This Section outlines the requirement for landscaping within the Borough. This Section should be updated to require the use of native vegetation (where feasible) that require less fertilization and watering. This Section should also be updated to allow the use of buffer areas for stormwater management and to encourage the separation or disconnection of impervious surfaces with vegetated areas to provide some filter or treatment of the runoff.

 - ❑ **Section 13-8.7: Clearing and Grading:** This Section outlines the requirement for clearing and grading. This Section should be updated to require the use of native vegetation (where feasible) that require less fertilization and watering. This Section should also be revised to allow the inclusion of the "Design and Performance Standards" requirements outlined in this plan.

 - ❑ **Section 13-8.9: Common Open Spaces and Public Open Spaces:** This Section outlines the requirement for any common or public open space created as part of a site plan or subdivision application. This Section should be revised to encourage the preservation of existing treed areas as well as the use of native vegetation (where feasible), since they require less fertilization and watering.

 - ❑ **Section 13-8.10: Curbs or Curbs and Gutters:** This Section requires that curbs or combination curbs and gutters be constructed along both sides of all existing and proposed streets. This Section should be amended to allow the use of curb cuts or flushed curbing with curb stops to allow vegetative swales to be used as stormwater conveyances and to allow the separation of impervious areas.

 - ❑ **Section 13-8.20: Off-Street Parking:** This Section outlines the requirements for parking areas. Buffer strips are required, as well as curbing and landscaping between parking areas and the street and buildings. This Section should be modified to encourage the use of native vegetation (where feasible) for landscaping, which requires less fertilizer and water than ornamental plantings. Additionally, the use of landscape islands should be encouraged to separate impervious surfaces. The curbing requirement should also be amended to allow the use of curb cuts or flush curbing with curb stops to allow vegetative swales to be used as stormwater conveyances and to allow the separation of impervious areas. This Section should also be amended to permit a portion of the required parking spaces to be "banked" and left as green space unless needed and to permit the use of pervious pavement (where feasible) to minimize the amount of impervious coverage.

 - ❑ **Section 13-8.22: Roadway Construction:** This Section describes the roadway pavement requirements. This Section should be updated to permit the use of pervious pavement (where feasible) to reduce the amount of impervious coverage.

- ❑ **Section 13-8.25: Sidewalks and Aprons:** This Section requires all streets have sidewalks and aprons constructed from poured concrete. This Section should be amended to allow the use of porous paving materials in areas with low pedestrian traffic. Language should be added to require new sidewalks and aprons to direct stormwater to neighboring lawns, where feasible. This design criterion will allow for the disconnection of impervious surfaces.
- ❑ **Section 13-8.28: Storm Drainage Facilities:** This Section outlines the requirement for all storm drainage facilities. This Section should be updated to encourage the use of the New Jersey Stormwater Best Management Practices and to comply with the standards set forth in the plan, as well as the stormwater control ordinances required by N.J.A.C. 7:8.
- ❑ **Section 13-8.29: Street Design:** This Section describes minimum street widths, right of ways, shoulders, cul-de-sac radii, the limit of through streets, etc. This Section should be updated to encourage the limitation of on-street parking, thereby allowing narrower streets where public safety permits. This Section should be updated to be consistent with RSIS.

Revisions of the ordinances identified above will allow the incorporation of the non-structural strategies. Drafts of the updated ordinances will be submitted to Monmouth County for review and approval within 12 months of the plan adoption.

Nonstructural Strategies

The plan recommends the practical use of the following nonstructural strategies for all major developments¹ in accordance with Subchapter 5 of the NJDEP *Best Management Practices (BMPs) Manual*:

1. Protect areas that provide water quality benefits or areas particularly susceptible to erosion and sediment loss.
2. Minimize impervious surfaces and break up or disconnect the flow of runoff over impervious surfaces.
3. Maximize the protection of natural drainage features and vegetation.
4. Minimize the decrease in the pre-construction “time of concentration.”

¹ Major Development – means any development that provides for ultimately disturbing one or more acres of land or increases impervious surface by one-quarter acre or more. Disturbance for the purpose of this rule is the placement of impervious surface or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation. Projects undertaken by any government agency which otherwise meet the definition of ‘major development’ but which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered “major development.”

5. Minimize land disturbance, including clearing and grading.
6. Minimize soil compaction.
7. Provide vegetated open-channel conveyance systems that discharge into and through stable vegetated areas.
8. Provide preventative source controls. In addition, Subchapter 5 further requires an applicant seeking approval for a major development¹ to specifically identify which and how these nonstructural strategies have been incorporated into the development's design. Finally, for each of those nonstructural strategies that were not able to be incorporated into the development's design due to engineering, environmental, or safety reasons, the applicant must provide a basis for this contention.

Recommended Measures

Recommendations in the BMP Manual may be implemented through the use of:

▪ **Vegetated Filter Strips**

Vegetated filter strips are engineered stormwater conveyance systems that treat small drainage areas. Generally, a vegetated filter strip consists of a level spreader and planted vegetation. The level spreader ensures uniform flow over the vegetation that filters out pollutants, and promotes infiltration of the stormwater.

Vegetated filter strips are best utilized adjacent to a buffer strip, watercourse or drainage swale since the discharge will be in the form of sheet flow, making it difficult to convey the stormwater downstream in a normal conveyance system (swale or pipe).

▪ **Stream Corridor Buffer Strips**

Buffer strips are undisturbed areas between development and the receiving waters. There are two management objectives associated with stream corridor buffer strips:

- To provide buffer protection along a stream corridor to protect existing ecological form and functions; and
- To minimize the impact of development on the stream itself (filter pollutants, provide shade and bank stability, reduce the velocity of overland flow).

¹ Major Development – means any development that provides for ultimately disturbing one or more acres of land or increases impervious surface by one-quarter acre or more. Disturbance for the purpose of this rule is the placement of impervious surface or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation. Projects undertaken by any government agency which otherwise meet the definition of 'major development' but which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered "major development."

Buffers only provide limited benefits in terms of stormwater management; however, they are an integral part of a system of best management practices.

- **The Stabilization of Banks, Shoreline and Slopes**

The root systems of trees, shrubs and plants effectively bind soils to resist erosion. Increasing the amount of required plant material for new development and redeveloped residential and non-residential sites should be encouraged throughout the Borough. Planting schemes should be designed by a Certified Landscape Architect to combine plant species that have complementary rooting characteristics to provide long-term stability.

- **Deterrence of Geese**

Maintaining or planting dense woody vegetation around the perimeter of a pond or wetland is the most effective means of deterring geese from taking over and contaminating local water bodies and ponds. Minimizing the amount of land that is mowed will also limit the preferred habitat for geese. Other deterrence methods and/or actions should also be investigated.

- **Fertilizers**

The use of fertilizers to create the “perfect lawn” is an increasingly common problem in many residential areas. Fertilizer runoff increases the level of nutrients in water bodies and can accelerate eutrophication² in the lakes and rivers and continue on to the coastal areas. The excessive use of fertilizer causes nitrate contamination of groundwater. Good fertilizer maintenance practices help in reducing the amount of nitrates in the soil and thereby lower its content in the water. Initially, the Borough should work with the NJDEP to educate homeowners of the impacts of the overuse of fertilizers. This discussion should include other techniques to create a “green lawn” without over fertilizing. Almost as important as the use of fertilizer is the combination of over fertilizing and over watering lawns. In many cases, this leads to nutrient rich runoff, which ultimately migrates to a nearby stream, lake or other water body. If fertilizer is applied correctly, the natural characteristics of the underlying soils will absorb or filter out the nutrients in the fertilizer.

Structural Stormwater Management³

In Chapter 9 of its *Stormwater Management Best Management Practices (BMP) Manual*, the Department of Environmental Protection identifies several structural stormwater management options. The Borough recommends the following structural devices. These structural methods should only be used after all non-structural strategies are deemed impracticable or unsafe. Specifically, the Borough encourages the use of structural stormwater management systems in a manner that maximizes the preservation of community character:

² Eutrophication – The normally slow aging process by which a lake evolves into a bog or marsh and ultimately assumes a completely terrestrial state and disappears.

³ Definitions provided in the NJDEP – Stormwater Best Management Practices Manual at: http://www.njstormwater.org/tier_A/bmp_manual.htm

- **Bioretention Systems**

A bioretention system consists of a soil bed planted with native vegetation located above an underdrained sand layer. It can be configured as either a bioretention basin or a bioretention swale. Stormwater runoff entering the bioretention system is filtered first through the vegetation and then the sand/soil mixture before being conveyed downstream by the underdrain system. Runoff storage depths above the planting bed surface are typically shallow. The adopted Total Suspended Solids (TSS) removal rate for bioretention systems is 90%.

- **Constructed Stormwater Wetlands**

Constructed stormwater wetlands are wetland systems designed to maximize the removal of pollutants from stormwater runoff through settling and both uptake and filtering by vegetation. Constructed stormwater wetlands temporarily store runoff in relatively shallow pools that support conditions suitable for the growth of wetland plants. The adopted TSS removal rate for constructed stormwater wetlands is 90%.

- **Dry Wells**

A dry well is a subsurface storage facility that receives and temporarily stores stormwater runoff from roofs of structures. Discharge of this stored runoff from a dry well occurs through infiltration into the surrounding soils. A dry well may be either a structural chamber and/or an excavated pit filled with aggregate. Due to the relatively low level of expected pollutants in roof runoff, a dry well cannot be used to directly comply with the suspended solids and nutrient removal requirements contained in the NJDEP Stormwater Management Rules, N.J.A.C. 7:8. However, due to its storage capacity, a dry well may be used to reduce the total stormwater quality design storm runoff volume that a roof would ordinarily discharge to downstream stormwater management facilities. Care should be taken with the location and size of drywells due to potential impacts on basements and foundations.

- **Extended Detention Basins**

An extended detention basin is a facility constructed through filling and/or excavation that provides temporary storage of stormwater runoff. It has an outlet structure that detains and attenuates runoff inflows and promotes the settlement of pollutants. An extended detention basin is normally designed as a multistage facility that provides runoff storage and attenuation for both stormwater quality and quantity management. The adopted TSS removal rate for extended detention basins ranges between 40 and 60%, depending on the duration of detention time provided in the basin.

- **Infiltration Basins**

An infiltration basin is a facility constructed within highly permeable soils that provides temporary storage of stormwater runoff. An infiltration basin does not normally have a structural outlet to discharge runoff from the stormwater quality design storm, but may require an emergency overflow for extraordinary storm events. Instead, outflow from an infiltration basin is through the surrounding soil. An infiltration basin may also be combined with an extended detention basin to provide additional runoff storage for both stormwater quality and quantity management. The adopted TSS removal rate for infiltration basins is 80%.

- **Manufactured Treatment Devices**

A manufactured treatment device is a pre-fabricated stormwater treatment structure utilizing settling, filtration, absorptive/adsorptive materials, vortex separation, vegetative components, and/or other appropriate technology to remove pollutants from stormwater runoff. The TSS removal rate for manufactured treatment devices is based on the NJDEP certification of the pollutant removal rates on a case-by-case basis. Other pollutants, such as nutrients, metals, hydrocarbons, and bacteria can be included in the verification/certification process if the data supports their removal efficiencies.

- **Pervious Paving Systems**

Pervious paving systems are paved areas that produce less stormwater runoff than areas paved with conventional paving. This reduction is achieved primarily through the infiltration of a greater portion of the rain falling on the area than would occur with conventional paving. This increased infiltration occurs either through the paving material itself or through void spaces between individual paving blocks known as pavers. Pervious paving systems are divided into three general types. Each type depends primarily upon the nature of the pervious paving surface course and the presence or absence of a runoff storage bed beneath the surface course. Porous paving and permeable pavers with storage bed systems treat the stormwater quality design storm runoff through storage and infiltration. Therefore, these systems have adopted TSS removal rates similar to infiltration structures. Care must be taken with the use of pervious systems to avoid subgrade instability and frost related deterioration. Pervious paving systems also require significant maintenance to maintain their designed porosity.

- **Sand Filters**

A sand filter consists of a forebay and underdrained sand bed. It can be configured as either a surface or subsurface facility. Runoff entering the sand filter is conveyed first through the forebay, which removes trash, debris, and coarse sediment, and then through the sand bed to an outlet pipe. Sand filters use solids settling, filtering, and adsorption processes to reduce pollutant concentrations in stormwater. The adopted TSS removal rate for sand filters is 80%.

- **Vegetative Filters**

A vegetative filter is an area designed to remove suspended solids and other pollutants from stormwater runoff flowing through a length of vegetation called a vegetated filter strip. The vegetation in a filter strip can range from turf and native grasses to herbaceous and woody vegetation, all of which can either be planted or indigenous. It is important to note that all runoff to a vegetated filter strip must both enter and flow through the strip as sheet flow. Failure to do so can severely reduce and even eliminate the filter strip's pollutant removal capabilities. The TSS removal rate for vegetative filters will depend upon the vegetated cover in the filter strip.

- **Wet Ponds**

A wet pond is a stormwater facility constructed through filling and/or excavation that provides both permanent and temporary storage of stormwater runoff. It has an outlet structure that creates a permanent pool and detains and attenuates runoff inflows and promotes the settlement of pollutants. A wet pond, also known as a retention basin, can also be designed as a multistage facility that also provides extended detention for enhanced stormwater quality design storm treatment and runoff storage and attenuation for stormwater quantity management. The adopted

TSS removal rate for wet ponds is 50 to 90%, depending on the permanent pool storage volume in the pond and the length of the retention time provided by the pond.

Each of these structures has advantages and disadvantages to manage stormwater. As previously noted, Union Beach is a fully developed community and anticipates the majority of new construction as residential infill development that will disturb less than 1-acre of land and have less than 1-acre of additional impervious coverage.

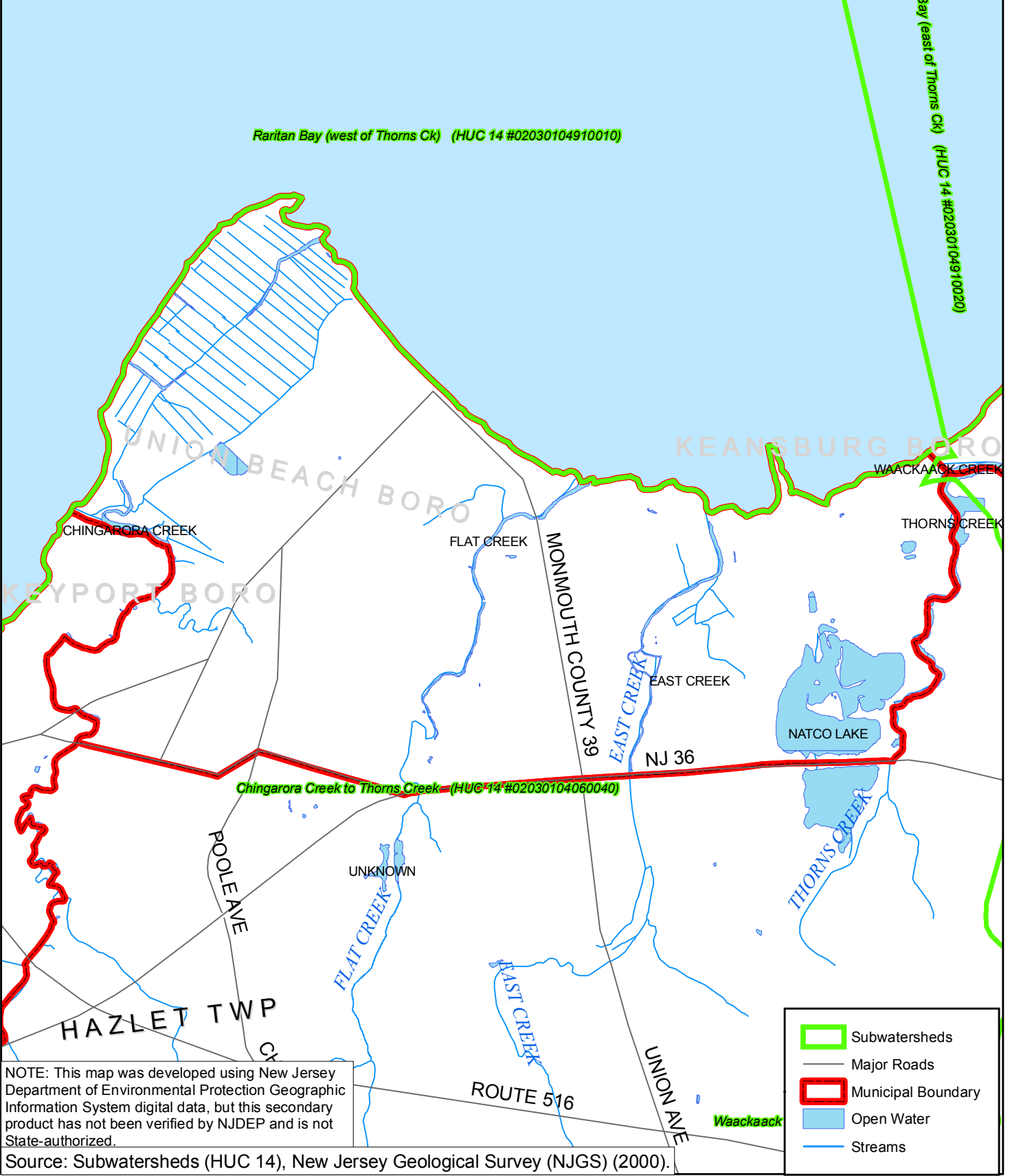
Land Use/ Build-Out Analysis

The Borough of Union Beach has less than one square mile of developable or vacant land and therefore is exempt from the NJDEP regulations requiring the development of a build-out analysis which would indicate the potential for development within the Borough. The limited amount of vacant land within the Borough is shown on Figure 3, which outlines the existing land uses within the Borough. Figure 9 illustrates the Hydrologic Units (HUC-14s), or subwatersheds, within the Borough and Figure 10 shows the constrained lands such as wetlands and open waters within the Borough.

Figure 9: Hydrologic Units: HUC-14s Borough of Union Beach Monmouth County, New Jersey



0 0.125 0.25 0.5 0.75 1 Miles



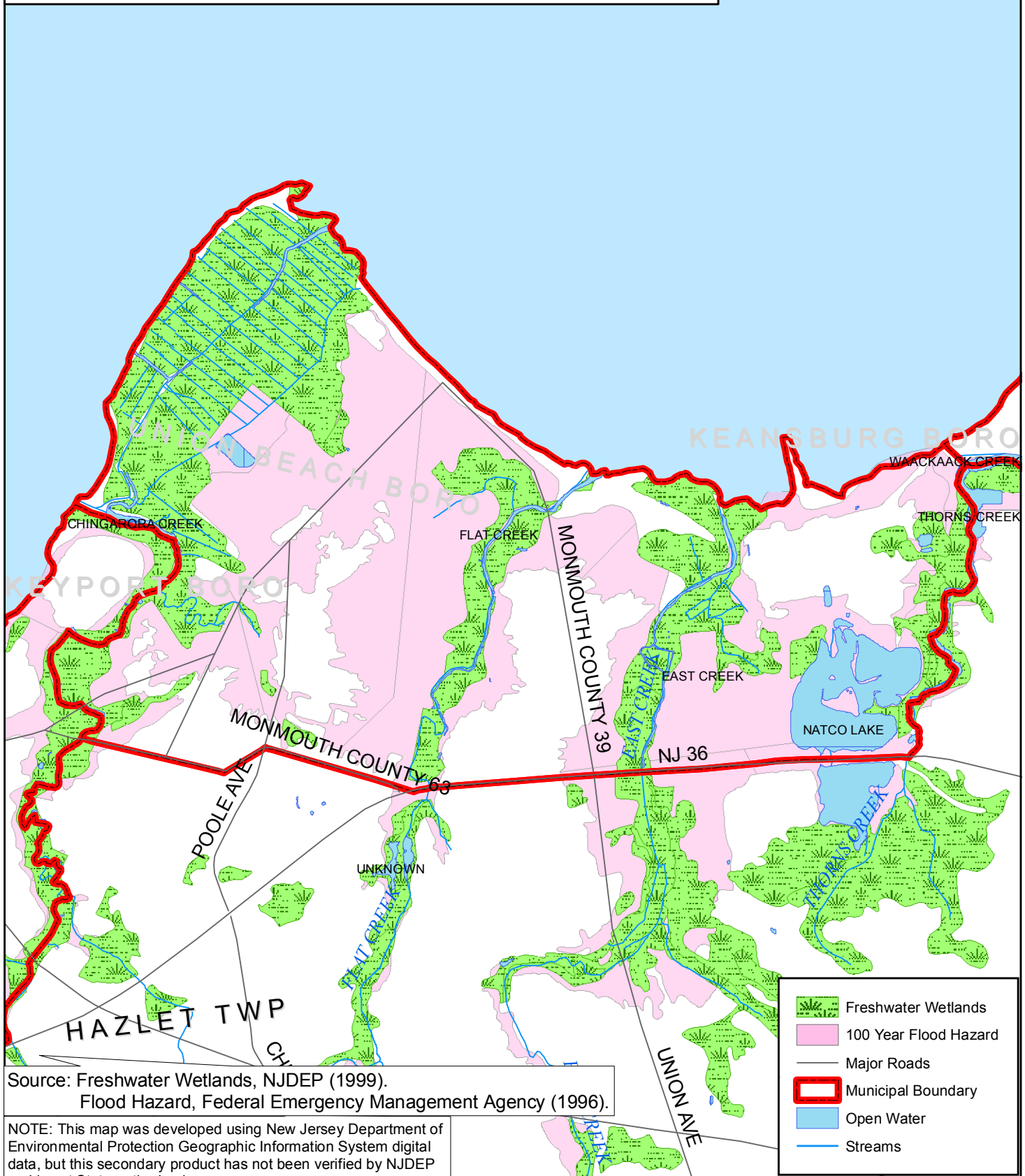
NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

Source: Subwatersheds (HUC 14), New Jersey Geological Survey (NJGS) (2000).

Figure 10: Wetlands and Water Land Uses
 Borough of Union Beach
 Monmouth County, New Jersey



0 0.125 0.25 0.5 0.75 1 Miles



Source: Freshwater Wetlands, NJDEP (1999).
 Flood Hazard, Federal Emergency Management Agency (1996).

NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

Mitigation Plan

This mitigation plan is provided for proposed development or redevelopment projects that seek a variance or exemption from the stormwater management design and performance standards set forth in this plan and N.J.A.C. 7:8-5.

Mitigation Project Criteria

To grant a variance or exemption from the stormwater regulations, new development and redevelopment plan applications must propose a mitigation project located within the same drainage basin as the proposed development/redevelopment. Proposed mitigation projects must provide for additional groundwater recharge benefits, protection from stormwater runoff quantity or quality from previously developed property that does not currently meet the design and performance standards outlined in this plan. Mitigation projects should also be as close in terms of hydrology and hydraulics to the proposed development/redevelopment as possible.

Projects must be proposed on an equivalent basis. Developers must propose a mitigation project similar in kind to the variance or exemption being requested. Proposed mitigation projects cannot adversely impact the existing environment.

Developer Mitigation Plan Requirements

Proposed mitigation projects shall have Mitigation Plans submitted to the Borough for review and approval prior to granting final approval for site development. Developers should include the following in a Mitigation Plan:

- Mitigation project name, owner name and address, developer name and address, mitigation project location, drainage area, cost estimate;
- Proposed mitigation strategy and impact to sensitive receptor, what is being impacted, mitigated, and how;
- Legal authorization required for construction and maintenance;
- Responsible party, including required maintenance, who will perform the maintenance, proposed cost of maintenance, and how it will be funded;
- All other permits required for construction of the mitigation project;
- Cost estimate of construction inspection; and
- Reason a waiver or exemption is requested and supporting evidence.

Due to the lack of vacant or developable land, it is anticipated that the majority of the mitigation projects proposed will result in retrofitting/rehabilitation of existing stormwater facilities and natural infrastructures. More detailed information is available from the Borough or the Borough Engineer's Office. It is the developer's responsibility to provide a detailed study of any proposed mitigation project and provide the Borough with a proposed mitigation plan for review and approval.

Recommendations

The following are additional recommendations associated with this Stormwater Management Plan Element of the *Master Plan*:

Recommendation A: Review and update the existing Land Development and Zoning Regulations to implement the principals of non-structural and structural stormwater management strategies to reduce stormwater quantity, improve stormwater quality and to maintain or increase groundwater recharge.

Portions of the existing Land Development and Zoning Regulations are inconsistent with recently adopted New Jersey Department of Environmental Protection (NJDEP) Stormwater Management Regulations and the NJDEP *Best Management Practices for the Control of Non-Point Source Pollution from Stormwater Manual*. Some of these inconsistencies are identified in the Stormwater Management Strategies section above. The Borough should update their existing regulations to be in conformance with these regulations and to minimize inconsistencies or conflicts.

Recommendation B: Educate residents on the impacts of the overuse of fertilizers and good fertilizer maintenance practices.

As stated in the Stormwater Management Strategies section above, the overuse of fertilizers has a significant detrimental impact on surface water bodies and groundwater. The Borough should work with the NJDEP to educate residents on these impacts and encourage residents to use techniques to create a “green lawn” without over-fertilizing and/or to convert lawn areas to other kinds of vegetation that do not require fertilization and other chemical treatments. Many lawn services also “overspray” fertilizer onto roadways and adjacent properties. The Borough should investigate methods to minimize the application of fertilizers beyond property lines.

Recommendation C: Educate residents on techniques to deter geese.

Geese population can take over and contaminate local water bodies. The planting of vegetation around the perimeter of a water body is an effective means of deterring geese.

Recommendation D: Seek to ensure the proper inspection, monitoring, and maintenance of all stormwater management facilities and develop strategies for all existing and future maintenance and improvements.

Stormwater facilities require regular maintenance to ensure effective and reliable performance. Failure to perform the necessary maintenance can lead to diminished performance, deterioration and failure. In addition, a range of health and safety problems, including mosquito breeding and the potential for drowning, can result from improperly maintained facilities. To minimize these risks, the Borough should implement a procedure for regular inspection, monitoring, and maintenance of Borough owned stormwater facilities.

Additionally, there are a number of privately maintained stormwater facilities within the Borough. The Borough should work with the various property owners, residents and business owners to identify maintenance and/or improvements needs and develop strategies for regular inspection and maintenance of these facilities.

The Borough should also encourage the use of low impact design methods and non-structural strategies that require less maintenance.

Recommendation E: Encourage existing storm drains to be replaced with bicycle safe grates and Campbell Foundry Model #N-2-ECO inlet heads (or approved equal) to prevent floatable and solid debris from entering the stormwater conveyance system.

Typical roadway debris, such as bottles and cans, can easily enter stormwater conveyance systems through typical inlet openings. This debris is then transported downstream into the receiving water bodies. By replacing existing storm drain inlets with new inlet grates and inlet heads, which have a maximum opening size of 2 inches by 4 inches, the amount of debris entering the stream can be reduced, improving water quality.

Recommendation F: Work with the Monmouth County Mosquito Commission to monitor existing and proposed BMP's.

Many of the recommended non-structural and structural strategies are designed to retain water for a period of time to promote groundwater recharge. These conditions could be favorable to mosquito breeding habitats. To date, there is no data relating mosquito breeding and best management practices. The Borough should coordinate new development and redevelopment projects using non-structural and structural strategies with the Monmouth County Mosquito Extermination Commission so that these facilities can be periodically monitored, inspected and maintained. Developers and the Borough should also solicit input from the Monmouth County Mosquito Extermination Commission early in the design process for new facilities to obtain additional guidance and recommendations.

Recommendation G: To reduce erosion and sedimentation in streams, encourage residents and property owners to minimize the amount of re-grading and to employ techniques to minimize soil erosion.

During construction, large amounts of disturbance or exposed soil are prone to soil erosion. This can result in accumulation and/or sedimentation in streams and elevated amounts of Total Suspended Solids, which can impact the existing vegetation and wildlife.

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RECYCLING PLAN ELEMENT

INTRODUCTION

The New Jersey Mandatory Statewide Source Separation and Recycling Act of 1987 (N.J.S.A. 13:1E-99.11 et. seq.) requires that municipalities incorporate the State Recycling Goals for collection, disposition, and recycling as a component of their Master Plans. To that end, Union Beach Borough created a local recycling program and recycling program coordinator, who provides annual reports annually to the New Jersey Department of Environmental Protection and addresses the pressing need to decrease solid waste generation and increase the amount of goods recycled.

The Municipal Land Use Law of 1975 (N.J.S.A. 40:55D-1 et. seq.) specifies that municipalities shall create an implementation mechanism to meet and exceed Statewide recycling goals. The Statewide goals represented a multi-year reduction of solid waste reduction to achieve a maximum feasible recovery target of recyclable materials by a minimum of sixty-five (65%) percent by the year 2000 (New Jersey Department of Environmental Protection, Bureau of Recycling & Planning, N.J.S.A. 13:1E-99.11 et seq.).

The Statewide goal serves as the basis of the Union Beach Borough's Recycling Plan Element. This Element provides an overview of the current status of solid waste management and recycling within the Borough, along with waste generation and recycling rates. Lastly, a series of recommended actions and programs are presented for the Borough to pursue in order to increase the percentage of solid waste that is recycled in the community.

CURRENT STATUS OF WASTE MANAGEMENT PROGRAM

Waste and Recycling Collection Program

Waste and recycling is collected from each residence, church, and all municipally owned buildings, parks and playgrounds, and facilities. The Borough of Union Beach prints a reference guide for its residents; highlighting items that are considered recyclables. The reference guide provides symbols delineating scheduled collection days for co-mingled containers, newspaper, and ferrous and non-ferrous metal products and provides contact information for further assistance. The Borough has been divided into two collection schedules which picks up recyclables every other Wednesday. The Recycling Yard is open weekly during business hours and every third Saturday of

the month. In regards to waste, the Borough has been divided into three collection areas and is picked up biweekly.

The Borough also maintains a Street Sweeping Ordinance effective March 1 through November 30 between the hours of 9:00 am to 3:30 pm. Union Beach is divided into twelve (12) separate areas and requires that residents keep roadways barrier free. The purpose of this ordinance is to reduce flood insurance rates for Borough residents.

Solid Waste

Waste resulting from food preparation and other general household functions, toys and small appliances is picked up twice per week. Trash cans should not exceed 50 lbs and any bundled bulks should be 50 lbs or less.

Excluded items include construction debris (broken concrete, asphalt, roofing shingles, dirt and rocks, sheet rock, or other items commonly referred to as construction debris); hazardous materials, and dirt, stones, concrete, bricks, tree stumps or logs that are greater than four (4) inches in diameter. All Monmouth County residents are able to dispose of their Household Hazardous Waste, defined as pesticides, paints, batteries, varnishes, pool chemicals and others not listed, at the Monmouth County Reclamation Center weekdays and on Saturday. The Monmouth County Reclamation Center is closed on New Year's Day, Thanksgiving Day and Christmas Day and open from 7:00 am to 12:00 pm on Memorial Day, Independence Day, and Labor Day. Residents may dispose of up to two (2) gallons a month of their spent Motor Oil at the Borough Recycling Yard.

So called "Bulk Trash," consisting of mattresses, box springs, furniture, wooden cabinets, wooden doors, screens, rolled carpet, tires, televisions, empty paint cans and similar items, scrap wood and branches are picked up by appointment once a month on the third Thursday of the month.

Recyclable Materials

The following recycled materials are collected bi-monthly and must be disposed of in the municipally provided 20 gallon container.

1. Co-mingled Bottles and Cans: which means mixing the following items in a reusable container:
 - Beverage and Food Containers: Aluminum and bi-metal containers.

- Glass: All products made from silica or sand, soda ash and limestone, the product being transparent or translucent and being used for packaging or bottling of various material commonly know as clear (flint), green or brown (amber) glass. Glass shall not include crystal, ceramics, cookware, light bulbs, and plate, window, laminated, wired or mirrored glass.
 - Plastics: Plastic products PET (symbol 1) and HDPE (symbol 2) with labels attached. These products are soft drink, laundry detergent, bleach or softener bottles & milk, water, and juice jugs. Residents are required to clean and drain all liquids from plastic containers; crushing the containers is optional.
2. Paper/Corrugated Cardboard: All uncontaminated newspaper and corrugated cardboard, tied with string or rope and placed in bundles, is picked up on designated collection days or may be dropped off at the Recycling Yard. Mixed paper (computer paper, office paper), books and junk mail may be dropped off at the Recycling Yard.

Other recyclable materials include:

1. Ferrous and Non-Ferrous Metal Products: All ferrous and non-ferrous metal/bulk appliances/white goods are picked up by appointment on the third Thursday of the month. These items include washers, dryers, dishwashers, ovens, refrigerators, freezers, hot water tanks, hot and cold water tanks, air conditioners, gas/oil/electric heaters, gas tanks, bicycles, metal lawn equipment or other large appliances.
2. Leaf Collection: During October to December and the month of April, the Borough collects leaves in a clear plastic bag curbside and at the Recycling Yard.

The Borough encourages that residents do not throw out their Grass Clippings. In the Monmouth County Recycling Directory instructions are provided in great detail on how to compost both indoors and outdoors.

3. Propane Tanks: Empty propane tanks with the valve removed may be disposed at the Department of Public Works by appointment.

4. Car Tires: Residents may dispose four (4) tires off the rim per street address at the Recycling Yard during business hours.
5. Ink Cartridges: Cartridges from computers, faxes and copier ink may be dropped off at the Department of Public Works office.
6. Car & Household Batteries: The Borough accepts all car and household batteries at the Recycling Yard.
7. Concrete & Asphalt: Limited quantities of concrete and asphalt are accepted at the Recycling Yard.

Monmouth County also sponsors other recycling programs which include:

1. Styrofoam Peanuts: Designated office supply stores throughout the County accept the loosefill polystyrene “peanuts” at their locations.
2. Miscellaneous: The County provides contact information for the following recyclable products for its residents.
 - a. Syringes & Needles
 - b. Eyeglasses
 - c. Disks, CDs and Videotapes
 - d. Greeting Cards
 - e. Flea Markets
 - f. Cell Phone Recycling
 - g. X-Rays & Dental Film
 - h. Smoke Detector Disposal

Waste Generation and Recycling Rates

The City produces annual Recycling Tonnage reports that categorize the recyclable materials collected throughout the year, in the following groups, but not limited to: aluminum containers, batteries (car & household), corrugated cardboard, electronics, glass & plastic containers, light bulbs, mixed office paper, nonferrous/aluminum scrap, newspapers, and white goods (Table R-1). During the time period of 1997

to 2002, Union Beach recycling rates ranged from 21.6 percent to 50.1 percent. The County recycling rates were included for illustrative purposes and ranges from 48.2% to 60.9%. The Borough remains lower than the County recycling rates. Overall the State Recycling goals of 65% has not been met.

**TABLE R-1
MUNICIPAL SOLID WASTE AND RECYCLING RATES TONNAGE
UNION BEACH BOROUGH & MONMOUTH COUNTY**

YEAR	SOLID WASTE TONNAGE		RECYCLING TONNAGE		TOTAL		RECYCLING RATE	
	Borough	County	Borough	County	Borough	County	Borough	County
1997	4,496	462,119	4,509	718,982.96	9,005	1,181,102	50.1	60.9
1998	4,251	513,573	1,173	516,871	5,424	1,030,444	21.6	50.2
1999	5,271	548,444	3,326	510,265	8,597	1,058,709	38.7	48.2
2000	5,332	612,351	3,023	678,540	8,355	1,290,891	36.2	52.6
2001	6,190	573,971	2,745	739,538	8,935	1,313,509	30.7	56.3
2002	5,201	625,934	3,621	853,851	8,822	1,479,785	41.0	57.7

Source: Monmouth County Utilities Authority & New Jersey Department of Environmental Protection, Division of Solid Waste and Recycling

RECOMMENDATIONS

Existing Recycling Areas of Concern

As part of the creation of this Recycling Plan Element, the Borough of Union Beach Recycling Coordinator was contacted to identify opportunities and constraints to improve recycling rates in Union Beach.

The Recycling Coordinator identified the following opportunity:

- Encourage regional based recycling efforts. The Recycling Coordinator would like to evaluate the various State programs that encourage regional recycling efforts, which may reduce overall administrative costs to the Borough.

The Recycling Coordinator identified the following constraint:

- Lack of enforcement powers. The Borough Contractor is required to inform the Recycling Coordinator if residents are recycling improperly. Recordkeeping is difficult to enforce and

maintain. The potential savings to the Borough may be a lot if all recyclable items were accounted for.

Grant/Loan Opportunities¹¹

The New Jersey Department of Environmental Protection, the New Jersey Department of Community Affairs and the non-profit New Jersey Clean Communities provide grants, loans, and technical assistance to encourage municipalities to increase their recycling waste tonnage. The Municipal Land Use Law provides for site plan specific recycling considerations for new construction and apartment dwelling units. In sum, the following programs aim to provide recycling incentives, encourage cost-sharing amongst neighboring municipalities, and target site plan reviews for new residential and non-residential construction.

New Jersey Department of Environmental Protection

1. Pay-As-You-Throw Program

Division of Solid and Hazardous Waste

Grant Amount: up to \$75,000 & based on recycling tonnage amounts (Not funded)

In New Jersey there about 46 municipalities that utilize pay-as-you-throw programs (United States Environmental Protection Agency—Region 2). Basically, a pay-as-you-throw program benefits residents who recycle more of their waste and charges residents who generate solid waste in excess of an established limit. There are two administrative approaches for this program are as follows:

- 1) limiting the number of cans that residents can put out for disposal. Any waste in excess will tagged with a cost assigned to that tag or sticker for the resident to pay;
- 2) selling specialized bags, tags, or stickers at a cost equal to the cost for disposal of 25-30 pounds of trash. Collection costs may be charged through taxes or as an added cost in the sale of the bags, tags or stickers.

It has been found in other communities that once residents understand that this approach is more equitable than charging everyone a flat rate in property taxes, they will readily adopt it.

The challenges of establishing a pay-as-you-throw program involve designing the best program for the community, finding the most effective process of educating residents about the program, and setting up a distribution network (i.e. retail outlets) for the bags, tags, or stickers. The costs to implement the program incorporate staff time and the distribution of information materials.

Contact: Sondra Flite (sondra.flite@dep.state.nj.us) - Bureau of Recycling and Planning
(609) 984-4621

¹¹New Jersey Department of Environmental Protection: A Guide to State Grants and Loans that Support Sustainability Initiatives (2005). & Grants and Loans Programs web site <http://www.state.nj.us/dep/grantandloanprograms/>

New Jersey Department of Environmental Protection continued

2. Recycling Tonnage Grants **Division of Solid and Hazardous Waste**

Award is dependent on Recycling Tonnage

A Recycling Tonnage Grant is based on the tonnage of recyclable material generated by and recovered for recycling by residential and or commercial sources within a municipality. Up to \$10 per ton are provided depending on the amount of funding available to the Recycling Grant Fund.

Contact: Joseph Davis (joseph.davis@dep.state.nj.us) - Bureau of Recycling and Planning
(609) 984-3438 www.state.nj.us/dep/dshw/recycle/

3. Local Tire Management Program Fund **Division of Solid and Hazardous Waste**

Grant Amount: up to \$300,000.00

Acknowledging that there are potential human health hazards and ecological concerns with stock piles of tires, municipalities can request funding from the Department of Environmental Protection to properly clean up abandoned tire pile sites. For this program, the funding sources are taxes collected on the sale of new tires.

Contact: Guy J. Watson (ed.nieliwocki@dep.state.nj.us) — Bureau of Recycling and Planning
(609) 984-3438

4. Clean Water Financing **New Jersey Environmental Infrastructure Trust**

Interest-Free Loan

Financing is provided by NJDEP and the New Jersey Environmental Infrastructure Trust (Trust). Municipalities, public sewerage or utility authorities, and other local government units are eligible to apply for low-cost financing to construct new or improved wastewater, stormwater or non-point source projects. For projects in the “Smart Growth” category, the DEP’s interest-free loan covers 75% of the allowable costs. Smart Growth projects include those in urban areas (Urban Centers/Complexes, combined sewer overflow (CSO) abatement, Transit Villages, etc.) as well as land acquisition and septic system repair/replacement projects Statewide. The Trust’s loans cover the remaining allowable project costs at market rate.

Contact: Stanley V. Cach, Jr. (stanley.cach@dep.state.nj.us)- Municipal Finance and Construction Element (609) 292-8961 www.state.nj.us/dep/dwq/mface.htm

New Jersey Department of Community Affairs

SHARE (Sharing Available Resources Efficiently) Local Government Services

Three Assistance Options:

Implementation: up to \$100,000 (25% Grant Match);

Feasibility Studies: up to \$20,000 (50% Grant Match);

Regional Coordination Grants: Half of the total project cost

The City can also consider bidding on waste and recycling services with adjoining municipalities to receive a more favorable price for services rendered. The New Jersey Department of Community Affairs' SHARE program provides assistance for the study or implementation of any regional service agreement, or for the coordination of programs and services authorized under the Interlocal Services Act, the Municipal Consolidation Act, and the Consolidated Municipal Services Act. Funded through the New Jersey Regional Efficiency Development Incentive Program, the program is available to local governments and nonprofit organizations. Priority will be given to Implementation Assistance Grants.

An EPA document entitled, *Joining Forces on Solid Waste Management*, explores this potential (<http://www.epa.gov/epaoswer/non-hw/muncpl/joining/jforce1.pdf>).

Contact: Local Government Services

(609) 292-7842.

http://www.state.nj.us/dca/lgs/interloc/grants/share_descript.doc

New Jersey Clean Communities

Clean Communities Entitlement Program

Award is dependent on Local Recycling Program

Municipalities that have the following programs in place, may use Clean Communities funding to defray expenses directly related to their Clean Communities program: Litter Cleanup and Removal; Litter/Graffiti Abatement; Public Education and Information; and Enforcement of litter-related laws and ordinances.

Contact: E. David Barth, Director—New Jersey Department of Environmental Protection, Division of Budget and Finance.

(609) 292-9230.

<http://www.njclean.org/docs/CC%202005%20Fact%20Sheet-1.doc>

Monmouth County has a Clean Communities Program sponsored by the Monmouth County Board of Freeholders and funded by NJDEP, as well as an "Adopt a Road" program. The Program contact information is (732) 431-7460.

Municipal Land Use Law

The Municipal Land Use Law suggests that municipalities with a Recycling Plan Element adopt a recycling ordinance to implement the provisions of the plan. The Borough of Union Beach promulgated regulations at Chapter 12-6 et. seq., MANDATORY PROGRAM FOR RECYCLABLE MATERIALS in 1989. The Borough should consider updating the language to reflect new policy directives to collect and dispose of spent motor oil in the amount of two gallons instead of five gallons as prescribed at Chapter 12-6.1e. In addition the Borough may consider adopting additional enforcement language as follows:

- Update existing Section 12-6.5 Enforcement, Violations and penalties with the following language.
 - a. This section shall be enforced by the recycling coordinator, and such departments of the Borough of Union Beach as designated by the Borough Administrator.
 - b. For a violation of any provision of this article, pursuant to N.J.S.A. 40:49-5, upon conviction the minimum fine shall be \$250 and the maximum shall not exceed \$10,000, or the convicted individual may spend up to 90 days in jail or both. As an alternate penalty, a convicted person may be ordered to perform community service in the recycling program, for a period not to exceed 90 days.
 - c. The only exception to Subsection b above is that failure to provide report records to the municipality pursuant to 12-6.6 shall result in a fine of \$100 for each offense.
 - d. Each day a violation or neglect has been committed or permitted to continue shall constitute a separate offense and be punishable as such.
 - e. Enforcement. A summons alleging a violation of this article may be issued by an official or employee of the Borough, any law enforcement official, the Code Enforcement Officer or any civilian, provided that the summons is issued pursuant to the Rules of Court.

Proposed New Chapter and language 12-6.6 Reporting requirements.

- a. It shall be mandatory for all haulers collecting residential and nonresidential recyclables, to provide a record to the Borough of Union Beach of the types and quantities of materials recycled. White receipts and/or letters on official company stationery should clearly describe the quantity and disposition of each materials and shall be submitted to the municipality quarterly within 30 days following the closing of each quarter.
- b. In such cases where a nonresidential establishment contracts with an independent hauler or handler for the collection and marketing of recyclable materials, it shall be the responsibility of said hauler or handler to provide at a minimum the weight receipts and/or letters on official company stationery clearly describing the quantity and disposition of each material and shall submit same to the municipality on a quarterly basis within 30 days following the close of each quarter.
- c. All nonresidential establishments shall further provide the Borough with the name and address of both the solid waste hauler and recycling hauler utilized other than that provided by the Borough and shall further provide information to Borough of any change of either hauler within 30 days of such change.

The Municipal Land Use Law provides for a recycling provision for new residential and commercial construction in the following manner:

. . . the collection, disposition and recycling of recyclable materials within any development proposal for the construction of 50 or more units of single-family residential housing or 25 or more units of multi-family residential housing and any commercial or industrial development proposal for the utilization of 1,000 square feet or more of land (N.J.S.A. 40:55D-28.b(12)).

The Borough has an opportunity to increase their compliance with the enabling legislation if these units or new construction is proposed at site plan review from the Planning Board. Union Beach may consider adopting the following rule provisions in the design requirements similar to the language in Chapter 13-8.27 Solid Waste Storage.

- Proposed new Chapter and language 13.8-35 Recycling area design requirements

13.8-35 Recycling area design requirements

Materials designated in Chapter 12-6, MANDATORY PROGRAM FOR RECYCLABLE MATERIALS shall be separated from other solid waste by the generator and storage area for recyclable materials which shall be provided as follows:

- a. Residential development (single-family and two-family dwellings). Each major application shall include provisions for the collection, disposition and recycling of recyclable materials. For major applications, each single-family unit or unit within a two-family dwelling should provide at least 12 square feet of floor area conveniently arranged and located as a holding area for a four week accumulation of mandated recyclables (including but not limited to newspapers, glass bottles, aluminum cans, tin and bimetal cans). The storage area may be within a laundry room, basement or garage.
- b. Multifamily development.
 - (1) There shall be included in any new multifamily housing development that requires subdivision or site plan approval an indoor or outdoor recycling area for the collection and storage of residentially generated recyclable materials.
 - (2) The dimensions of the recycling area shall be sufficient to accommodate recycling bins or containers which are of adequate size and number, and which are consistent with anticipated usage and with current methods of collection in the area in which the project is located. The dimensions of the recycling area and the bins or containers shall be determined in consultation with the municipal recycling coordinator, and shall be consistent with the district recycling plan adopted pursuant to N.J.S.A. 13:1E-99.13.c. and any applicable requirements of the municipal Master Plan, adopted pursuant to Section 28 of N.J.S.A. 40:55D-1 et. seq..

- (3) The recycling area shall be conveniently located for the residential disposition of source separated recyclable materials, preferably near, but clearly separated from, a refuse dumpster.
 - (4) The recycling area shall be well lit, and shall be safely and easily accessible by recycling personnel and vehicles. Collection vehicles shall be able to access the recycling area without interference from parked cars or other obstacles. Reasonable measures shall be taken to protect the recycling area, and the bins or containers placed therein, against theft of recyclable materials, bins or containers.
 - (5) The recycling area or the bins or containers placed therein shall be designed so as to provide protection against adverse environmental conditions which might render the collected materials unmarketable. Any bins or containers which are used for the collection of recyclable paper or cardboard, and which are located in an outdoor recycling area, shall be equipped with a lid, or otherwise covered, so as to keep the paper or cardboard dry.
 - (6) Signs clearly identifying the recycling area and the materials accepted therein shall be posted adjacent to all points of access to the recycling area. Individual bins or containers shall be equipped with signs indicating the materials to be placed therein.
 - (7) Landscaping and/or fencing shall be provided around any outdoor recycling area and shall be developed in an aesthetically pleasing manner.
- c. Nonresidential development. For each site plan application for commercial and industrial development that utilizes 1,000 or more square feet of land, the applicant shall provide the Borough and/or Board of Adjustment with estimates of the quantity of mandated recyclable materials (including but not limited to newspaper, glass bottles, aluminum cans, tin and bimetal cans, high-grade paper and corrugated cardboard) that will be generated by the development during each week. A separate storage area must be provided to accommodate a one- to four-week accumulation of recyclable materials. The Borough or Board of Adjustment may require the location of one or more common storage areas at convenient locations within the

development. The storage area shall be designed for truck access for pick up of materials and be suitably screened from view if located outside a building.

- d. The recyclable materials designated in this section shall not be deemed to be the exclusive recyclables to be considered during a development application. If and in the event Chapter 12-6, MANDATORY PROGRAM FOR RECYCLABLE MATERIALS, shall be amended to provide for other recyclable materials, the Planning Board and/or Board of Adjustment shall require an applicant to make accommodations for additionally designated recyclables.

CONCLUSION

The Borough should be constantly investigating new opportunities to reduce their overall waste stream and increase recycling opportunities.

The Borough should continue to update and enforce its Recycling Program and encourage participation through its land use ordinance. Residents will participate in recycling programs if it is made convenient and accessible. The land use regulations should require the provision of adequate space on site to collect and store recyclables in an attractive and safe facility. These facilities should be located in a manner that is accessible for pick up by the municipality.

STATEMENT OF CONSISTENCY ELEMENT

INTRODUCTION

The New Jersey Municipal Land Use Law (MLUL) requires municipalities to examine the consistency of their Master Plan with those of adjacent communities, the county in which the municipality is located, and the State Development and Redevelopment Plan (SDRP). This is done as an element of the Master Plan, and ensures the compatible development of lands that border one another but are located in separate communities and are under different jurisdictions.

The following is an analysis that compares Union Beach's Master Plan, land uses, and zoning to neighboring municipalities' master plans, as well as the additional aforementioned plans. In general, land uses and zoning plans are complimentary to those in the adjoining municipalities.

ANALYSIS OF SURROUNDING COMMUNITIES

Union Beach Borough is bordered by Raritan Bay to the north, Keansburg and Hazlet to the east, Hazlet Township to the south, and Keyport Borough to the west. Directly abutting Union Beach to the south and east is the Township of Hazlet. The portion of Hazlet bordering Union Beach to the north consists of residential uses, highway commercial uses, industrial assembly and public conservation. Southern Union Beach Borough is zoned for residential, highway commercial, and industrial uses. The location of the residential, commercial and industrially zoned areas in both Union Beach adjoin similar areas in Hazlet Township. The preserved open space within the Public Conservation district in Hazlet adjoins Natco Lake in Union Beach, which is a municipally owned lake.

The western area of Union Beach is zoned M-2 Industrial and adjoins Bayshore Mobile Home Manor, single-family residential properties and industrial marine zoning. The lands in Union Beach adjoining Hazlet to the east are a undeveloped portion of the International Flowers and Fragrance site and currently does not create a land use conflict. Furthermore, the borders of Union Beach and the western border of Hazlet are separated by a watercourse that further diminishes land use conflicts. Union Beach also shares a common border with a small portion of Keansburg. This area

of Keansburg is zoned for Conservation Recreation and borders environmentally constrained lands within Union Beach.

Therefore, we do not find the land uses on the Hazlet and Keansburg borders to be conflicting.

Keyport Borough borders a portion of Union Beach Borough to the east. The portions of Keyport bordering Union Beach are zoned for a residential planned industrial development and single-family housing. Southwestern Union Beach is zoned for M-2 Heavy Industrial. A watercourse running between the two municipalities and environmentally constrained lands within both Union Beach and Keyport serve as a buffer between non-residential sections of Union Beach and Keyport Borough. However, the Borough of Union Beach should monitor Keyport's plans within the residential planned industrial residential housing district.

CONSISTENCY WITH THE MONMOUTH COUNTY GROWTH MANAGEMENT GUIDE

The Monmouth County Growth Management Guide, adopted in December 1995, sets forth a series of goals and objectives designed to enhance the quality of life for residents of Monmouth County. The Union Beach Master Plan is consistent with those objectives, which include:

- Encourage the creation of a safe, attractive and appealing environment for pedestrians
- Promote the efficient utilization of land, resources, transportation, capital and infrastructure
- Encourage the provision of public lands in concert with natural resource preservation
- Encourage the coordination of housing development with the provision of other community services, public transit, economic development, employment opportunities, recreation, education and public safety.

CONSISTENCY WITH THE STATE DEVELOPMENT AND REDEVELOPMENT PLAN (SDRP)

The Union Beach Borough Master Plan is consistent with the plans and policies of the SDRP, which was adopted in 2001. The SDRP places non environmentally constrained areas Borough of Union Beach in the Metropolitan Planning Area (PA1). Exceptions to the PA1 designation are wetland and floodplain areas that are located within the Environmentally Sensitive Planning Area (PA5).

According to the State Plan, most of the communities within the PA1 planning area are fully developed or almost fully developed with little vacant land available for new development. The Union Beach Borough Master Plan is consistent with the State Plan by preserving and protecting the established residential character of the Borough, promoting economic development by encouraging appropriate infill and redevelopment and promoting a diversification of land uses, promoting a fully intermodal transportation system that will enhance local circulation and reduce automobile dependency, promoting a balance of housing options to meet the needs of all residents, preserving and upgrading the existing utility infrastructure, providing adequate park, recreation and open space facilities, and preserving and protecting valuable historic and natural features within the Borough.