

**BERKELEY TOWNSHIP, OCEAN COUNTY
STATE AGENCY OPPORTUNITIES & CONSTRAINTS ANALYSIS**



**NEW JERSEY OFFICE OF SMART GROWTH
JULY 3, 2008**

TABLE OF CONTENTS

INTRODUCTION	3
BACKGROUND.....	3
RELATION TO THE STATE DEVELOPMENT & REDEVELOPMENT PLAN (STATE PLAN)	3
NEW JERSEY OFFICE OF SMART GROWTH (OSG) TREND ANALYSIS	4
BERKELEY TOWNSHIP – TREND ANALYSIS	5
FIGURE 1: BERKELEY TOWNSHIP RESIDENTIAL BUILD OUT METHOD	7
FIGURE 2: BERKELEY TOWNSHIP COMMERCIAL BUILDOUT	8
FIGURE 3: BERKELEY TOWNSHIP COMMERCIAL BUILDOUT	10
CROSS-ACCEPTANCE III.....	11
APPENDIX A: BERKELEY TOWNSHIP ZONING SCHEDULE	12
APPENDIX B: BERKELEY TOWNSHIP POPULATION GROWTH	125
APPENDIX C: BERKELEY TOWNSHIP MAP AMENDMENTS	126

INTRODUCTION

On May 20, 2008, Berkeley Township of Ocean County submitted their Municipal Self-Assessment Report to the New Jersey Office of Smart Growth (OSG). As such, OSG and our partner State Agencies have preliminarily assessed local opportunities and constraints, as it relates to existing development, current zoning regulations, infrastructure and natural resources. This report provides for a comparison of information within the Municipal Self-Assessment Reports with the most up-to-date regional and statewide data to determine whether TREND growth is sustainable and viable based on the information provided. This information is intended to guide and direct the visioning process as to develop a vision with a twenty-year planning horizon. The vision shall provide for sustainable growth, recognize fiscal constraints, housing needs and protection of natural, historic and agricultural resources. Community visioning shall take into consideration the findings and conclusions of the Municipal Self-Assessment and the State Agencies' Opportunities and Constraints Analysis.

BACKGROUND

The Township of Berkeley initiated the Plan Endorsement process by attending a pre-petition meeting with OSG and our partner State agencies on August 17, 2004. On February 26, 2008, the Township of Berkeley passed a resolution (Resolution No. 08-127-R) authorizing the creation of their Plan Endorsement Advisory Committee (PEAC), in which seven members were designated. As previously mentioned, the Township submitted their Municipal Self Assessment Report to OSG for review on May 20, 2008. The Municipal Self Assessment Report was authorized by the Township of Berkeley via resolution number 08-149-R. Pursuant to the proposed State Planning Rules, N.J.A.C. 5:85-7.10, this State Agency Opportunities and Constraints Analysis has been provided to the Township on July 3, 2008.

RELATION TO THE STATE DEVELOPMENT & REDEVELOPMENT PLAN (STATE PLAN)

As with many town centers, which contain a mix of office, retail, institutional and residential uses, much of the land is surrounded by large areas of rural and environmental sensitive features. Like much of New Jersey, residential subdivisions are replacing these open areas consequentially transforming rural roads which are increasingly congested with traffic from trip commercial development. Specifically, suburban commercial strip, where roads and surface parking lots dominate the landscape, single use, low-density zoning has led to dependence on the automobile, which in turn has resulted in severe peak-hour congestion. As seen in Berkeley Township, where strip commercial development has been prosperous, some older shopping centers have closed or become underutilized, making them unable to compete with large-format, big box retail.

As seen in many areas throughout the State of New Jersey, strip development along the highway has continued, resulting in many miles of highway-oriented uses and a cluttered, unappealing environment. Parallel road networks are not being created, requiring every trip—even short local trips—to enter onto the highway. As a result, extreme traffic congestion, safety concerns and conflicts between regional mobility and local access have led to several highway widenings. As such, older shopping centers have continued to decline due to competition from big box retail. Through this type of TREND development, stormwater runoff from parking and roads is degrading the water quality of nearby streams and some open space, woodlands, and farmland still remain, wildlife habitat is fragmented. Under TREND development, many town centers lose their role as the commercial and social hub for the surrounding area. As TREND development occurs, increased non-point source pollution leads to a decline in the quality of surrounding

watercourses and areas suitable for significant habitat. TREND development and housing also fragments green corridors which degrades trails and aquifer recharge areas, while adjacent open spaces defining the town center is overwhelmed by development.

Through PLAN development, smart growth approaches to the corridor focuses growth in a series of compact centers along the highway, connected by bus transit. Infrastructure improvements and other incentives encourage redevelopment of the failed shopping centers with attractive, higher density, mixed-use structures convenient to adjacent structured parking. PLAN development also encourages well-designed offices and higher density housing, which should be connected and accessible to retail and service uses. As part any redevelopment effort, a new internal street network should create real places and helps disperse traffic. Under PLAN development, multiple mixed-use areas straddling the highway can be developed further down, separated from the existing area by open space. With PLAN development, balanced in-fill growth in a town center reinforces the traditional mix of uses. It is imperative that the proposed town centers maintain their surrounding open spaces and provide for local protections of pristine lands, watercourses and habitat. As such, tributaries should be protected by open space buffers while mechanisms should be adopted for the preservation of water recharge areas. PLAN development should call for improved station area facilities including shared parking initiatives and enhanced transit shelters. This fosters a reduction for access to adjacent state highways and limits unnecessary road expansions. Ultimately, residential growth is redirected to these existing centers therefore encouraging revitalization and renewal.

Abandoned or under-performing shopping centers offer opportunities to retrofit our suburbs into more humane and efficient environments. A vacant retail strip facing a vast parking lot can prove to become an area appropriate for compact growth through redevelopment and revitalization. In a phased approach responsive to market realities, these sites can be returned to the tax rolls and transformed into a vibrant, mixed-use environment through the addition of second- and third-story housing over the original building, with retail and services remaining on the ground floor. This can foster the construction of a second mixed-use building front on part of the former parking lot, as to create a traditional streetscape and lively community. Parking can be provided along the new street, in the back, or in the form of a parking deck.

NEW JERSEY OFFICE OF SMART GROWTH (OSG) TREND ANALYSIS

The TREND Analysis performed by OSG was conducted based on the current zoning information that was provided in the Municipal Self-Assessment Report. OSG took into account known environmental constraints and impediments to development. These constraints included identified State Plan parkland, State Agriculture Development Committee (SADC) preserved farms, wetlands (with a 25 foot buffer), presence of Category 1 (C1) streams, existing developed land including infrastructure, and identified surface water. The net result from the TREND Analysis will determine the amount of housing and commercial space that can potentially be built given current zoning regulations.

Ultimately, the information provided throughout this document shall be utilized to inform the Community Visioning Process. However, the objective of this TREND Analysis is to determine what the municipality may resemble at full buildout based on current land use and zoning regulations. This series of worksheets represents a basic methodology for the TREND Analysis. Based on mapping data and zoning regulations, OSG inserted relevant data transferred from the Township's zoning language, into the Residential Buildout Method and Commercial Buildout - Floor Area Ratio Method. Please note that this analysis does not include those lands under the jurisdiction of the New Jersey Pinelands Commission.

As reference, OSG used year 2000 Census data to determine Berkeley Township 's average household size, which was identified as 1.99 persons per household (median) (U.S. Census Bureau (2000). *American FactFinder: Berkeley Township, N.J.* Retrieved June 28, 2008, from http://factfinder.census.gov/servlet/SAFFacts?_event=ChangeGeoContext&geo_id=06000US3402905305&geoContext=&street=&county=berkeley&cityTown=berkeley&state=04000US34&zip=&lang=en&sse=on&ActiveGeoDiv=&useEV=&pctxt=fph&pgsl=010&submenuId=factsheet_1&ds_name=DEC_2000_SAFF&ci_nbr=null&qtr_name=null®=null%3Anull&keyword=&industry=.

The zoning schedule for Berkeley Township has been attached as *Appendix A* for reference to definitions of the various zones considered in this analysis. Tables used in calculating the results of the TREND Analysis have been shown as *Figures 1 through 3* for reference for Berkeley Township. A brief summary of the findings is provided below and is intended to be used as a guide during the visioning process.

BERKELEY TOWNSHIP – TREND ANALYSIS

SUMMARY TABLE

category	totals*
land consumption (acres)	
gross sum	3,729.5
minus mixed-use double count**	
acres consumed	3,729.5
buildings	
residential units	5,078.0
commercial sq ft	41,123,253.6
people	
residents	10,096.0
jobs	65,725.1

* formulas total all commercial worksheets on the basis that only one would be selected and the other two would remain zero

** per the NOTE above, the petitioner should make sure that they are not double-counting acreage for a mixed use zone

Berkeley Township Residential Buildout Method

The Residential Buildout Method (*Figure 1*) assumes buildout of existing residential zones at the maximum density permitted by the Township's current zoning ordinance. Dependent upon future development pressure, the information provided in the Residential Buildout Method will come to fruition as existing zoning allows and provides for such development.

Historically, the Township had seen a significant increase in overall population between 1970 and 1990, as provided in *Appendix B*. According to the 2000 Census, there are 39,990 people residing within the Township of Berkeley. The Residential Buildout Method provides that current zoning can support an additional 10,096 residents, based on land availability and average household size as provided 2000 U.S. Census data. The North Jersey Transportation Planning Authority (NJTPA), the Metropolitan Planning Organization (MPO) for Ocean County, provides that 2005 MPO data estimated a 12% increase in persons residing within the Township, with less estimated growth pressures occurring between 2005 and 2010. The TREND analysis projects that the buildout of the Township's current zoning will likely transpire between the years of 2015 and 2020, given the accuracy of NJTPA's forecasted population estimates.

In addition to population estimates, the Residential Buildout Method provides current zoning can support 5,078 additional residential units. According to the 2000 U.S. Census, there are 22,288 housing units existing within the Township, of which 2,460 are vacant and 1,511 of which are for seasonal, recreational and occasional use. As such, the TREND analysis, based on current zoning, estimates that buildout would occur when 27,366 residential units exist within the Township. These potential units could be absorbed by 2,648 acres of developable land; however this estimate does not consider impervious coverage limits for projects applicable to the Coastal Area Facilities Review Act, otherwise known as CAFRA.

The Residential Buildout Method provides that a majority of projected new residents would encompass the Town Center (TC) zone. As provided in the Township's Master Plan Reexamination Report, 2003, this zone is located within the Eastern Mainland section of the Township, specifically within the proposed Berkeley Town Center (TC). The intent of this Town Center, as outlined in the Berkeley Town Center Plan, is to retrofit existing strip-type development along the Route 9 corridor into concentrated, mixed-use alternatives; promote in-fill development and efficient use of existing infrastructure; promote a well designed town center as the focus of the Township's growth; preserve environmentally sensitive coastal resources; maximize circulation and mobility options; and maximize housing opportunities. The full execution of the proposed Transfer of Development Rights (TDR) program will enable the Township to implement this vision as to maintain and permanently preserve contiguous tracts of extensive open space.

Secondary to the TC zone, zones R125 and R150 would also absorb much of the projected growth within the Township. The R125 zone includes the Pinewald section of the Township. As provided in the proposed TDR program, certain sections of Pinewald will be examined as potential sending areas as to transfer these development rights into the TC zone, a potential receiving area. The land in the designated receiving area can then be developed at a higher density than allowed under the current zoning ordinance. This process reduces the consumption of our critical resources, while still accommodating growth, and eliminates the "windfalls and wipeouts" in property values normally associated with zoning changes. The TDR is a unique planning tool that is beneficial to all stakeholders, as the community preserves its critical resources, landowners retain their equity and developers get to build at a critical mass that reduces their bottom line. Please note that OSG split the TC zone to account for the residential and commercial component, as provided in *Figures 1 and 2*.

Based on information obtained through the Municipal Self Assessment it is evident that development pressures within the Township are lower than the remainder of the State. There is, however, no accurate measure to predict precisely when real-estate market pressures will arise within the Township. Nonetheless, the Township must ensure that growth occurs in a controlled, center-based and compact form, in which the environs are protected and the vision of the Township is realized.

FIGURE 1: BERKELEY TOWNSHIP RESIDENTIAL BUILDOUT METHOD

Residential Buildout Method

residential zone	total land in residential zone (acres)	total constrained land in residential zone (acres)	total developable land (acres)	total developable residential land (acres)	maximum residential density permitted (units per acre)	potential number of units	average household size (persons per unit)	number of new residents
	a	b	c=a-b	d=c*0.8	e	f=d*e	g	h=f*g
R-MF	95.8	67.2	28.6	22.88	0.22	4	1.99	7
R-31.5	44.6	44.2	0.4	0.32	13.83	4	1.99	7
R-50	206.9	200.9	6	4.8	8.71	41	1.99	81
R-60	196.4	194.8	1.6	1.28	7.26	9	1.99	17
R-64	301.2	298.3	2.9	2.32	6.81	15	1.99	29
R-100	1033.9	913.7	120.2	96.16	4.36	418	1.99	831
R-125	856.2	592.4	263.8	211.04	3.48	735	1.99	1462
R-150	1005.4	462	543.4	434.72	2.90	1262	1.99	2511
R-200	1169.7	892.4	277.3	221.84	2.18	483	1.99	961
R-400	850.2	525.4	324.8	259.84	1.09	282	1.99	561
R-400 PRRC	3848.3	3366	482.3	385.84	1.09	420	1.99	835
CR	1774.5	1417.4	357.1	285.68	0.33	95	1.99	189
PPC	1793.9	1689.9	104	83.2	0.20	16	1.99	31
R-2F	42.8	38.1	4.7	3.76	2.90	10	1.99	19
R-4F	13.1	12.1	1	0.8	0.00	0	1.99	0
R-LR	18.9	18.9	0	0	0.00	0	1.99	0
R-TH	16.9	16.8	0.1	0.08	0.00	0	1.99	0
TC	129	0	129	103.2	12.45	1284	1.99	2555
total	13397.7	10750.5	2647.2	2117.76		5078		10096
land consumption				buildings			people	

NOTES

b: constrained lands include conserved land, public ownership, conservation easements (deed restrictions), utility easements, or natural factors such as wetlands, floodplains & steep slopes)

d: 0.8 figure is based on 20% takeup of land for right of ways (i.e. roads)

e: data based on current zoning

FIGURE 2: BERKELEY TOWNSHIP COMMERCIAL BUILDOUT - FLOOR AREA RATIO METHOD

Commercial Buildout - Floor Area Ratio Method

commercial zone	total land in commercial zone (acres)	total constrained land in commercial zone (acres)	total developable land (acres)	permitted FAR	maximum floorspace permitted (sq ft)	floorspace per job (sq ft)	number of jobs
	a	b	c=a-b	d	e=a*d*43560	f	g=e/f
retail			0				
TC	129	0	129	0.3	1685772	1000	1685.772
total	129	0	129		1685772		1685.772
land consumption				buildings		people	

NOTES

b: constrained lands include conserved land, public ownership, conservation easements (deed restrictions), utility easements, or natural factors such as wetlands, floodplains & steep slopes)

d: data based on current zoning

f: data based on COAH standards

Berkeley Township Commercial Buildout – Building Cover Method

The Commercial Buildout Method (*Figure 2*) assumes buildout of currently designated commercial zones at the maximum density permitted under current zoning regulations. While encouraging the growth of commercial businesses within the Township is admirable, zoning for such commercial enterprises must be realistic and planned according to the Township's vision – a vision which should include mixed use centers thus encouraging Township residents to live within close proximity to where they work and shop to minimize auto use, reduce traffic congestion and enhance pedestrian mobility.

At present time, the Township's zoning indicates that an additional 39,437,482 square feet of commercial floor space can be supported at current zoning and within the amount of available land within these commercial districts. The addition of this commercial space yields approximately 64,039 jobs (NOTE: the floorspace per job (sq. ft.) calculations are based on the Council of Affordable Housing's (COAH) standards). OSG's Commercial Buildout Method provides that a majority of this commercial growth will be absorbed by the General Industrial (GI) and Light Industrial (LI) districts. The Township should examine the potential of the GI zone as viable sending areas, as to direct commercial growth into the Town Center. Expansion within the LI district will be limited due to CAFRA.

The Highway Business (HB) zone will also absorb much of the Township's commercial growth, primarily in the form of retail establishments, as opposed to the mining and gravel operations dominating the GI and LI districts. Per the Municipal Self-Assessment Report, the Township is proposing a series of nodes and a second Town Center (Shop Rite Area) along the Route 9 corridor. Per the State Plan, the Township must ensure that these nodes and the proposed center provide for smart growth approaches to the corridor in order to focus growth in a series of compact centers along the highway, connected by bus transit. The Township should encourage well-designed offices and higher density housing within these nodes and the proposed Town Center, which should be connected and accessible to retail and service uses. Again, as part any redevelopment effort, particularly as it pertains to the Route 9 corridor, a new internal street network should create real places and helps disperse traffic. These multiple mixed-use areas straddling the highway can be developed further down, as proposed, and separated from the existing area by open space, allowing for balanced in-fill growth which reinforces the traditional mix of uses.

While a goal of creating jobs and fostering economic development within the state is a goal of the State Plan, this must be realized in areas which have the infrastructure to support such commercial development. Additionally, from current trends as indicated in the Township's Municipal Self Assessment, the current economic climate does not support such job growth in Berkeley Township. A vision which realistically realizes the Township's capacity and the statewide demand for job growth in the Township should be created to promote opportunities for unique niche economic areas that will support and sustain current and future residents of all income levels.

FIGURE 3: BERKELEY TOWNSHIP COMMERCIAL BUILDOUT - BUILDING COVER METHOD

Commercial Buildout - Building Cover Method

commercial zone	total land in commercial zone (acres)	total constrained land in commercial zone (acres)	total developable land (acres)	percentage of land allowed to be covered by building (%)	maximum amount of land to be covered by building (acres)	maximum number of stories allowed	maximum amount of floorspace (sq ft)	floorspace per job (sq ft)	number of jobs
	a	b	c=a-b	d	e=a*d/100	f	g=e*f*43560	h	i=g/h
retail									
NB	31.8	29.5	2.3	60	19.08	1	831124.8	1000	831.1248
HB	531.7	394	137.7	50	265.85	1	11580426	1000	11580.426
RHB	111.3	75.4	35.9	50	55.65	1	2424114	1000	2424.114
RB			0		0		0	1000	0
industrial									
GI	643.6	85.1	558.5	30	193.08	2	16821129.6	500	33642.2592
LI	297.7	78.8	218.9	30	89.31	2	7780687.2	500	15561.3744
total	1616.1	662.8	953.3		622.97		39437481.6		64039.2984

land
consumption

buildings

people

NOTES

b: constrained lands include conserved land, public ownership, conservation easements (deed restrictions), utility easements, or natural factors such as wetlands, floodplains & steep slopes)

d, f: data based on current zoning

h: data based on COAH standards

CROSS-ACCEPTANCE III

On April 28, 2004, the New Jersey State Planning Commission approved the release of the Preliminary State Development and Redevelopment Plan (State Plan) and the Preliminary State Plan Policy Map. This action launched the third round of Cross-acceptance.

Cross-acceptance is a bottom-up approach to planning, designed to encourage consistency between municipal, county, regional, and state plans to create a meaningful, up-to-date and viable State Plan (N.J.S.A. 52:18A-202.b.).

This process is meant to ensure that all New Jersey residents and levels of government have the opportunity to participate and shape the goals, strategies and policies of the State Plan. Through Cross-acceptance, negotiating entities work with local governments and residents to compare their local master plans with the State Plan and to identify potential changes that could be made to achieve a greater level of consistency with statewide planning policy.

Berkeley Township: State Development and Redevelopment Plan Policy Map

Berkeley Township did not provide comments to the Ocean County Planning Board, the Negotiating Entity for Ocean County municipalities, for negotiation with OSG and the SPC, as it relates to policy issues.

However, the Township submitted five (5) map amendments that have been provided in *Appendix C*. Two (2) of these items (OSG Item 11001 and 11002) have been deemed Agree Conditional and Agreement respectively. The other three items (OSG Item 11003, 11101 and 12201) were deemed as a Disagreement during the Cross-acceptance process. OSG and our State agency partners may be more able to closely examine these proposed map amendments for further consideration, however it seems that the proposed changes do not abide by OSG mapping conventions.

The current State Plan Policy Map, adopted in 2001, depicts Suburban Planning Area 2, Rural Planning Area 4, Environmentally Sensitive Planning Area 5 and Parks and Natural Areas. Per the 2001 State Plan Policy Map, there are 12,118 acres of Suburban Planning Area 2; 2,460 acres of Environmentally Sensitive Planning Area 5; 185 acres of Environmentally Sensitive Barrier Island Planning Area 5B and 2,454 acres of Parks and Natural Areas. The 2004 Preliminary State Plan Policy Map is proposing amendments to all four planning areas. As such, there will be 11,373 acres of Suburban Planning Area 2; 1,826 acres of Environmentally Sensitive Planning Area 5; 211 acres of Environmentally Sensitive Barrier Island Planning Area 5B and 3,808 acres of Parks and Natural Areas once the State Development and Redevelopment Plan (State Plan) is finalized and adopted. These calculations do not include the changes that will be made per OSG Items 11001 and 11002. With the exception of the proposed center and node designations, no additional planning area changes are being proposed by Berkeley Township. Again, please note that these State Plan planning area designations fall outside the jurisdiction of the New Jersey Pinelands Commission.

The State Development and Redevelopment Plan Policy Map 2001 as well as the Preliminary Policy Map for the third round of Cross Acceptance has been enclosed for reference. Ultimately, the State Planning Commission will make the final determination on all amendments to the State Plan Policy Map. Additional changes proposed beyond those indicated in Preliminary Policy Map, such as the re-designation of all SPC designated centers, shall occur through the Plan Endorsement process.

APPENDIX A: BERKELEY TOWNSHIP ZONING SCHEDULE

35-95 SCHEDULE 1. SCHEDULE OF REQUIREMENTS
TOWNSHIP OF BERKELEY

Zone			Setbacks ¹⁰						Minimum Floor Area (sq. ft.)	Maximum Lot Coverage (%)	Maximum Building and Structure Height (ft.)
	Minimum Lot Area (sq. ft.)	Minimum Lot Frontage (ft.)	Minimum			Both Sides (ft.)	Minimum Accessory ⁹				
			Front ⁷ (ft.)	Rear (ft.)	Side (ft.)		Rear (ft.)	Side (ft.)			
R-MF	200,000	200	50	50	50	100	25	25	See Note 1.	25	35
R-31.5	3,150 ⁷	45	20	10	5	15	5	5	720	35	35
R-50	5,000 ⁷	50	35 ⁸	20	5	15	5	5	720	35	35
R-60	6,000 ⁷	60	35 ⁸	20	7	18	5	5	864	30	35
R-64	6,400 ⁷	80	25	20	7	18	5	5	864	30	35
R-100	10,000	100	35	30	10	30	10	10	See Note 3.	25	35
R-125	12,500	100	35	30	10	25	7	7	See Note 3.	25	35
R-150	15,000	100	35	30	10	25	7	7	See Note 3.	25	35
R-200	20,000	125	40	30	15	35	15	15	See Note 3.	20	35
R-200A ⁴	20,000	125	40	30	15	35	15	15	See Note 3.	20	35
R-400/R-400A ⁴	40,000	200	40	40	25	50	15	15	See Note 3.	20	35
R-400PRRC ⁵	40,000	200	40	40	25	50	15	15	See Note 2.	20	35
Conservation/ Residential Zone			See standards in subsection 35-96.1A								
Public Preservation/ Conservation Zone			See standards in subsection 35-96.1B								
NB	5,000	50	25	20	- ¹¹	- ¹¹	5	5	400	60	25
HB	15,000	150	50	40	15	40	10	10	700	50	35
RHB	5,000	50	15	10	- ¹¹	- ¹¹	5	5	400	50	25
RB	434,600	400	100	50	50	100	50	50	25,000	20	35
IP ⁶	434,600	400	100	50	50	100	50	50	5,000	25	35
LI	43,560	200	50	40	40	80	40	40	5,000	30	35

GI	200,000	200	50	40	40	80	40	40	5,000	30	40
R-2F	15,000	125	35	30	10	30	10	10	See Note 1.	25	35
R-4F	See standards in subsection 35-96.9										
R-TH	See standards in subsection 35-96.10										
R-LR	See standards in subsection 35-96.11										
RC	See standards in subsection 35-106.4										
BR	See standards in subsection 35-96.9										

*Notes can be found in text

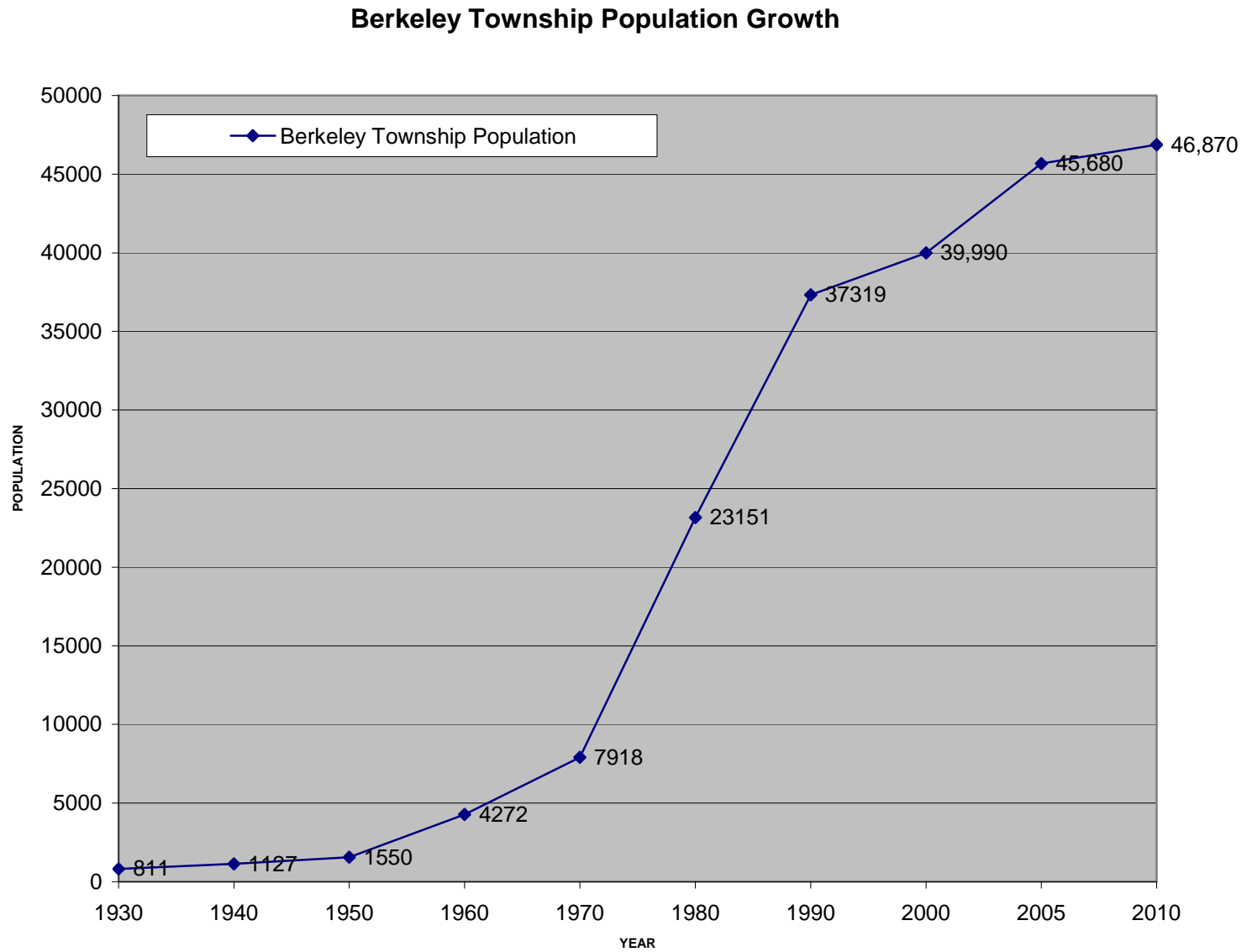
Notes to Schedule 1, Section 35-95.

- 1 See subsection 35-96.7
- 2 PRRC: One (1) bedroom, eight hundred (800) square feet; two (2) bedroom, nine hundred (900) square feet; three (3) bedroom, one thousand (1,000) square feet.
- 3 One (1) bedroom, nine hundred fifty (950) square feet; two (2) bedroom, one thousand one hundred (1,100) square feet; three (3) bedroom and larger, one thousand two hundred fifty (1,250) square feet.
- 4 See Section 35-103 requirements.
- 5 See Section 35-101 requirements.
- 6 See subsection 35-107.4 for requirements.
- 7 See subsection 35-89.5.
- 8 Front setback requirements in the R-50 and R-60 Residential Zones may be reduced to twenty-five (25) feet, provided that the lot in question is served by a municipal or public water and sewer system and that the setback distance for any new structure will not be less than the average setback of the existing structures within the same block face.
- 9 Sheds of one hundred twenty (120) square feet and less may be constructed and placed not less than three (3) feet from the rear property line and three (3) feet from any side line in any zone of the Township, except that in all circumstances where the rear property line of a building lot is a bulkheaded lagoon area, the aforesaid shed shall not be less than five (5) feet from any such bulkhead.
- 10 The following shall be exceptions to the setback requirements under this chapter:
 - A. Roof eaves may project not more than three (3) feet into the required yard area.
 - B. Architectural features. Windowsills, belt courses and similar architectural features, rain leaders and chimneys may project not more than two (2) feet into the required yard area.

-
- C. Exterior stairways and fire escapes. Exterior stairways going to a second story, smokeproof towers, balconies, fire escapes or other required elements of a means of egress may not project more than four (4) feet beyond the face of the wall. This exception shall apply only to rear and side yards and to those structures which presently comply with the minimum sideyard requirements under this chapter.
 - D. Entrance stoops and stairways are excepted as long as same are not more than six (6) feet in height above the average finished grade within ten (10) feet of their perimeters and are no less than twelve (12) feet from the property line when same are located in the front yard and no more than six (6) feet from the structure and not less than one (1) foot from the property line when located in a side yard or rear yard.

(Ord. No. 99-36-OAB § 3; Ord. No. 04-24-OAB)

APPENDIX B: BERKELEY TOWNSHIP POPULATION GROWTH



APPENDIX C: BERKELEY TOWNSHIP MAP AMENDMENTS (CROSS-ACCEPTANCE)



New Jersey State Planning Commission Negotiations Worksheet Map Amendments

County:	OCEAN COUNTY	Item No.	11001
Source:	County Report	Approved by OSG Director:	
NE #	Berkeley-110-1/12	Preliminary Staff Recommendation:	Agree Conditional / Mod

Quads Affected:

OSG Quad Number 110, TOMS RIVER NJ
OSG Quad Number 111, SEASIDE PARK NJ

Proposed Change:

Planning Area From: PA5 To: PA2

Acres:

County/NE Reason For Proposed Change:

On the Toms River Quad, PA 5 to PA 2. This area is already developed and should not be designated as environmentally sensitive. The area extends onto the Seaside Park Quad.

(NOTE: Public comment from Americal Littoral Society stating that there should be close review of environmental data for Berkeley's proposed PA2 changes).

What is it in Current State Plan:

PA5

What is it in Preliminary State Plan:

PA5

Municipalities Affected:

Berkeley Twp;

Data Source:

Staff Response:

Agree with change to PA2 for most of area, which is developed. The area should be joined to PA2 to the west. Eastern tip is undeveloped according to aerial photos and therefore should remain part of PA5.



**New Jersey State Planning Commission
Negotiations Worksheet
Map Amendments**

County:	OCEAN COUNTY	Item No.	11002
Source:	County Report	Approved by OSG Director:	
NE #	Berkeley-110-2/13	Preliminary Staff Recommendation:	Agreement

Quads Affected:

OSG Quad Number 110, TOMS RIVER NJ

Proposed Change:

Planning Area From: PA5 To: PA2

Acres:

County/NE Reason For Proposed Change:

PA5 to PA2. This area is already developed and should not be designated as environmentally sensitive.

(NOTE: Public comment from Americal Littoral Society stating that there should be close review of environmental data for Berkley's proposed PA2 changes).

What is it in Current State Plan:

PA2

What is it in Preliminary State Plan:

PA5

Municipalities Affected:

Berkeley Twp;

Data Source:

Staff Response:

Agree. Area is developed similar to adjacent PA2.



**New Jersey State Planning Commission
Negotiations Worksheet
Map Amendments**

County:	OCEAN COUNTY	Item No.	11003
Source:	County Report	Approved by OSG Director:	
NE #	Berkeley-110-3/14	Preliminary Staff Recommendation:	Disagreement

Quads Affected:

OSG Quad Number 110, TOMS RIVER NJ

Proposed Change:

Planning Area From: PA5 To: PA2

Acres:

County/NE Reason For Proposed Change:

PA5 to PA2. This area is already developed and should not be designated as environmentally sensitive.

(NOTE: Public comment from Americal Littoral Society stating that there should be close review of environmental data for Berkley's proposed PA2 changes).

What is it in Current State Plan:

PA5

What is it in Preliminary State Plan:

PA5

Municipalities Affected:

Berkeley Twp;

Data Source:

Staff Response:

Area is developed (boating/fishing facility?) but is too small and surrounded by PA5 marshes to warrant a change to PA2.



**New Jersey State Planning Commission
Negotiations Worksheet
Map Amendments**

County:	OCEAN COUNTY	Item No.	11101
Source:	County Report	Approved by OSG Director:	
NE #	Berkeley-111-1/1	Preliminary Staff Recommendation:	Disagreement

Quads Affected:

OSG Quad Number 111, SEASIDE PARK NJ

Proposed Change:

Planning Area

From: PA5

To: PA2

Acres:

County/NE Reason For Proposed Change:

PA5 to PA2. This area is already developed and should not be designated as environmentally sensitive.

(NOTE: Public comment from Americal Littoral Society stating that there should be close review of environmental data for Berkeley's proposed PA2 changes).

What is it in Current State Plan:

PA5

What is it in Preliminary State Plan:

PA5

Municipalities Affected:

Berkeley Twp;

Data Source:

Staff Response:

The area is too small and is surrounded by PA5. The area itself contains wetlands. Lastly, PA5 designation does not dictate that no development can occur, but rather suggests that planned densities and land uses recognize environmental issues.



**New Jersey State Planning Commission
Negotiations Worksheet
Map Amendments**

County:	OCEAN COUNTY	Item No.	12201
Source:	County Report	Approved by OSG Director:	
NE #	Berkeley-111-1/1	Preliminary Staff Recommendation:	Disagreement

Quads Affected:

OSG Quad Number 122, FORKED RIVER NJ

Proposed Change:

Planning Area From: PA5 To: PA2

Acres:

County/NE Reason For Proposed Change:

On the Seaside Park Quad, PA5 to PA2. This area is already developed and should not be designated as environmentally sensitive.

(NOTE: Public comment from Americal Littoral Society stating that there should be close review of environmental data for Berkley's proposed PA2 changes).

What is it in Current State Plan:

PA2

What is it in Preliminary State Plan:

PA5

Municipalities Affected:

Berkeley Twp;

Data Source:

Staff Response:

PA5 designation does not dictate that no development can exist or occur, but rather suggests that planned densities and land uses recognize environmental issues.

New Jersey Department of Environmental Protection



State Development & Redevelopment Plan Plan Endorsement Opportunities & Constraints Analysis

for

Berkeley Township, Ocean County

July 2, 2008

This document constitutes the Department of Environmental Protection's component of the State Opportunity and Constraints Analysis conducted as part of the Plan Endorsement process. This document provides information that serves as a baseline to inform the rest of the Plan Endorsement process. The document provides a general overview of the Department's regulatory and policy concerns within Berkeley Township. While care has been taken to address all major issues, the evolving nature of scope and jurisdiction of regulatory programs and natural conditions dictates that the information contained within this document presents a "snapshot" in time of the data and other information available to the Department as of the date of preparation. No portion of this document shall be interpreted as granting any specific regulatory or planning approvals by the Department. This document is to be used solely as guidance for municipal planning purposes.

TABLE OF CONTENTS

2002 Land Use/Land Cover	- 4 -
Water & Wastewater Analysis.....	- 5 -
Water Availability.....	- 5 -
Wastewater Treatment	- 8 -
Water Quality Management Plan - Sewer Service Area Mapping	- 9 -
Environmental Constraints Analysis.....	- 11 -
Regulated Environmental Constraints	- 11 -
Wetlands	- 11 -
Category One (C1) Waterbodies & Associated Buffers	- 12 -
Floodprone areas	- 13 -
Environmental Constraints to Avoid	- 14 -
Threatened & Endangered Species Habitat	- 14 -
Natural Heritage Priority Sites.....	- 15 -
Environmental Constraints to Consider	- 17 -
Groundwater Recharge Areas	- 17 -
Well Head Protection Areas.....	- 17 -
Priority Species Habitat	- 18 -
Total Maximum Daily Loads (TMDL).....	- 18 -
Contaminated Areas Considerations.....	- 21 -
Known Contaminated Sites List	- 21 -
Known Contaminated Sites - Classification Exception Areas (CEA)	- 26 -
Known Contaminated Site- Current Known Extent Areas (CKE)	- 26 -
Landfills	- 27 -
Preserved Lands and Historic Resources.....	- 28 -
Preserved Lands	- 28 -
Historic Resources	- 32 -
Regional Planning Areas.....	- 34 -
Coastal Area Facility Review Act (CAFRA).....	- 34 -
Pinelands Commission.....	- 35 -
The Barnegat Bay National Estuary Program (BBNEP)	- 36 -
Summary of Major Issues: Berkeley Township.....	- 38 -
Maps and Additional Information.....	- 40 -
NJDEP Office of Planning and Sustainable Communities	- 66 -

2002 Land Use/Land Cover

The 2002 Land Use/Land Cover (LULC) dataset reveals the land uses and natural land cover statewide. The land use/land cover data set contains important land use data that is used in a wide variety of environmental analyses, including this analysis, as well as in other DEP programs.

The dataset is based on aerial photo imagery captured in the Spring of 2002 and was produced by visually interpreting color infrared photography. Every effort has been made to ensure that all land use data sets are as accurate as possible. However LULC data is not intended to substitute for on the ground jurisdictional boundaries. Since the dataset is based upon photos, changes to land use on parcels that have occurred since the date of the imagery will not be depicted. Where more up to date land use cover information is required, this dataset should be updated with local information about changes in land uses due to development, agricultural practices, mining or other activities that alter the landscape.

The land uses represented by this dataset, while assumed to be accurate for regional planning purposes, are not considered accurate for the purposes of establishing the Department's regulatory jurisdiction over lands or waters. Where site specific land use information is necessary to establish regulatory jurisdictional parameters, onsite investigation will be needed. For example, the wetlands areas depicted within this dataset were first mapped using aerial photo imagery from 1986 by the New Jersey Freshwater Wetlands Mapping Program and were incorporated into the land use land cover datasets. Since the date of the original mapping, site specific wetland investigations, permitting and in some instances, violations, have altered the extent of lands mapped as wetlands in 1986 resulting in a net diminishment of the extent of this land cover type.

Based on this analysis, the following land use/land cover types, and their approximate acreages, are found in Berkeley Township:

Type	Acres
AGRICULTURE	47.8
BARREN LAND	740
FOREST	11,142.2
URBAN	7,907.9
WATER	7,629.6
WETLANDS	6,907.7
BEACHES	267.7

Attachments:

- Map- Land Use/Land Cover in Berkeley Township

Water & Wastewater Analysis

Sufficient water supply and the ability to treat wastewater are essential to any community. The following information on Water Availability and Wastewater Treatment should be used by the community to evaluate its ability to meet current and future demand for water and wastewater treatment. Using this information to plan for future development allows a municipality to estimate the number of people the current (and/or future systems) can sustain. It also provides a way for a municipality to determine where growth is most appropriate, taking into account where water can be supplied and. Wastewater treated.

Water Availability

The following information on Water Availability in Berkeley Township is based upon the best data readily available to DEP at the time of this analysis. This data should be used by Berkeley Township to inform its community vision and planning processes.

There are nine (9) Public Water Supply Systems in Berkeley Township.

BERKELEY TOWNSHIP			
PWSID	Water System Name	Population Served	Water System Type
1505003	SHORE WATER COMPANY	760	Community
1505003	SHORE WATER COMPANY	4,040	Community
1507005	UNITED WATER TOMS RIVER	19,431	Community
1526001	SEASIDE HEIGHTS WATER DE	1	Community
1505002	AQUA NJ EASTERN DIVISION	12,000	Community
1505004	BERKELEY TWP MUA	8,960	Community
1521001	OCEAN GATE WATER DEPT	100	Community
1505312	CRYSTAL LAKE HEALTH CARE	190	Community
1505312	CRYSTAL LAKE HEALTH CARE	192	Community

The Deficit/Surplus tables for each Public Water System may be found on the Department of Environmental Protection, Division of Water Supply website at <http://www.nj.gov/dep/watersupply/pws.htm>. Not all Public Water Supply Systems will have associated Deficit/Surplus tables available on the Department's website. The website currently contains public water systems that have a demand greater than 100,000 gallons of water per day and have had some water main extension activity since January 1, 2002. If you require safe demand and firm capacity information not available on this web site please contact the Bureau of Water System and Well Permitting at 609-984-6831 or for water allocation information please contact the Bureau of Water Allocation at 609-292-2957.

- The Shore Water Company appears to have a surplus allocation, but no information is available regarding firm capacity or the level of service provided to Berkeley Township.
- The Berkeley Water Company deficit/surplus tables indicate that there is a firm capacity surplus of 0.377 MGD. There is no information regarding the level of service provided to Berkeley Township.
- The deficit/surplus tables for the United Water Toms River facility indicate a 5.687 MGD surplus; however, the level of service provided to the Township is not indicated.

- The Seaside Heights Water Department deficit/surplus table available indicates that there is a firm capacity surplus of 1.094 MGD. No information was available indicating the level of service to Berkeley.
- Berkeley Township MUA facility has a surplus capacity of 0.609 MGD according to its deficit/surplus table. The level of service provided to the Township is not provided.
- The Ocean Gate Water Department facility deficit/surplus table indicates that it is operating at a deficit of 0.140MGD. The level of service provided to Berkeley is not provided.

There are fifty (50) Non-Community Water Systems serving specific uses in Berkeley Township.

BERKELEY TOWNSHIP			
PWSID	Water System Name	Population Served	Water System Type
1505375	AIR PARK EMERGENCY SERVI	20	Noncommunity Transient
1505375	AIR PARK EMERGENCY SERVI	100	Noncommunity Transient
1505379	MILLER AIRPORT FAIRGROUNDS	2	Noncommunity Transient
1505379	MILLER AIRPORT FAIRGROUNDS	1,000	Noncommunity Transient
1505376	OCEAN CNTY AIRPORT HANGAR	25	Noncommunity Transient
1505365	OCEAN COUNTY UTILITIES A	150	Noncommunity Non-transient
1505306	JCP&L	27	Noncommunity Non-transient
1505308	ISLAND BEACH STATE PARK/AREA 6	500	Noncommunity Transient
1505386	NJDEP ISLAND BEACH STATE PARK	500	Noncommunity Transient
1505389	ISLAND BEACH STATE PARK SO. END	500	Noncommunity Transient
1505323	BERKLEY TWP MUNICIPAL CO	100	Noncommunity Non-transient
1505323	BERKLEY TWP MUNICIPAL CO	150	Noncommunity Non-transient
1505384	GETTY STATION #56157	25	Noncommunity Transient
1505377	CAP HANGAR CIVIL AIRPARK	25	Noncommunity Transient
1505378	AIR TERMINAL BLDG #56	25	Noncommunity Transient
1505382	GOOD LUCK POINT MARINA INC	258	Noncommunity Transient
1505374	LACEY GARAGE	25	Noncommunity Transient
1505324	PUBLIC WORKS BLDG	15	Noncommunity Non-transient
1505324	PUBLIC WORKS BLDG	35	Noncommunity Non-transient
1505324	PUBLIC WORKS BLDG	75	Noncommunity Non-transient
1505355	CENTRAL REGIONAL HIGH SCHOOL	127	Noncommunity Non-transient
1505355	CENTRAL REGIONAL HIGH SCHOOL	1,600	Noncommunity Non-transient
1505355	CENTRAL REGIONAL HIGH SCHOOL	2,899	Noncommunity Non-transient
1505388	OCEAN GATE YACHT BASIN, INC.	24	Noncommunity Transient
1505388	OCEAN GATE YACHT BASIN, INC.	250	Noncommunity Transient
1505333	DOUBLE TROUBLE STATE PARK	6	Noncommunity Transient
1505333	DOUBLE TROUBLE STATE PARK	25	Noncommunity Transient
1505342	DOWNES MARINA	29	Noncommunity Transient
1505325	CEDAR CREEK CG-FAMILY POOL	2	Noncommunity Transient
1505325	CEDAR CREEK CG-FAMILY POOL	40	Noncommunity Transient
1505325	CEDAR CREEK CG-FAMILY POOL	300	Noncommunity Transient
1505326	CEDAR CREEK CG - CAFE	4	Noncommunity Transient
1505326	CEDAR CREEK CG - CAFE	100	Noncommunity Transient
1505326	CEDAR CREEK CG - CAFE	300	Noncommunity Transient

1505360	WATERS EDGE RESTAURANT	15	Noncommunity Transient
1505360	WATERS EDGE RESTAURANT	20	Noncommunity Transient
1505372	HILLTOP2 NURSERY SCHOOL #1	50	Noncommunity Non-transient
1505385	HILLTOP II NURSERY SCHOOL #2	45	Noncommunity Non-transient
1505387	BERKELEY HEADSTART	48	Noncommunity Non-transient
1505336	CEDAR CREEK GC-CLUBHOUS	12	Noncommunity Transient
1505336	CEDAR CREEK GC-CLUBHOUS	20	Noncommunity Transient
1505336	CEDAR CREEK GC-CLUBHOUS	400	Noncommunity Transient
1505336	CEDAR CREEK GC-CLUBHOUS	5,000	Noncommunity Transient
1505337	CEDAR CREEK GC-MAINT	100	Noncommunity Transient
1505353	CEDAR CREEK MUNICIPAL CG	1	Noncommunity Transient
1505353	CEDAR CREEK MUNICIPAL CG	100	Noncommunity Transient
1505338	BERKLEY ISLAND PARK	1	Noncommunity Transient
1505338	BERKLEY ISLAND PARK	250	Noncommunity Transient
1505340	VFW #9503	9	Noncommunity Transient
1505340	VFW #9503	75	Noncommunity Transient

Attachments:

- Deficit/Surplus table – Shore Water Company
<http://www.nj.gov/cgi-bin/dep/watersupply/pwsdetail.pl?id=1505003>
- Deficit/Surplus table- United Water Toms River
<http://www.nj.gov/cgi-bin/dep/watersupply/pwsdetail.pl?id=1505003>
- Deficit/Surplus table- Brick Township MUA
<http://www.nj.gov/cgi-bin/dep/watersupply/pwsdetail.pl?id=1506001>
- Deficit/Surplus table- Berkeley Water Company
<http://www.nj.gov/cgi-bin/dep/watersupply/pwsdetail.pl?id=1505002>
- Deficit/Surplus table- Berkeley Township MUA
<http://www.nj.gov/cgi-bin/dep/watersupply/pwsdetail.pl?id=1505004>
- Deficit/Surplus table- Ocean Gate Water Department
<http://www.nj.gov/cgi-bin/dep/watersupply/pwsdetail.pl?id=1521001>
- Map - Water Purveyor Areas and Public Supply Wells

Wastewater Treatment

The following information on Wastewater Treatment in Berkeley Township is based upon the best data readily available to DEP at the time of this analysis. This data should be used by Berkeley Township to inform its community vision and planning processes.

There is one wastewater facility serving the Sewer Service Area within Berkeley Township: Central Water Pollution Control Facility (or Ocean County Utilities Authority) (NJPDES # NJ0029408) and it is listed on the [municipal flow data summary for 2006](#). According to this chart the permitted flow for this facility is 32 mgd and in 2006 the average flow was 22.17 mgd. This indicates that there is potentially 9.8 mgd available to serve new development in Berkeley Township. Based on the assumption that a residential unit uses 300 gpd, the remaining flow for this facility could accommodate approximately 32,666 new residential units. However, all of the remaining flow will not be available to Berkeley Township exclusively as the Central Water Pollution Control Facility serves several other communities in the Ocean County.

Amendments to the Groundwater Quality Standards (N.J.A.C. 7:9C) were adopted by the Department in June of 2008. The primary implication of this change related to this analysis is the establishment of a 2 mg/L (or parts per million, or ppm) nitrate/nitrogen as representative of the existing ground water quality statewide, for the purpose of evaluating compliance with the groundwater antidegradation policy at N.J.A.C. 7:9C-1.8(a). Previously, the Groundwater Quality Standard for nitrate/nitrogen was 5.2 mg/L. Based on 2 ppm NO₃/N limitations, the Department has developed a maximum "septic density" for different watersheds in the State that identifies what the *comparable residential zoning density* that is necessary be in order to meet the groundwater quality goal. Hydrologists who study surface waters have classified watersheds based upon their size and drainage characteristics using a numeric hydrologic unit code or HUC. In analyzing the septic density, the Department chose to focus on watersheds ranked as HUC 11, which means that these watersheds are of a size that corresponds with an 11 digit number, hence the term, HUC 11.

The implications of the standards are that the Department will not approve a wastewater plan or site specific amendment unless it finds that the development allowed by the Wastewater Management Plan or amendment will not result in a change in the area's existing ground water N/NO₃ levels in excess of 2 mg/L nitrate on a watershed basis. While a community could choose to simply establish minimum residential lots sizes in septic areas to correspond to the HUC 11 density limits, the Department does not require uniformly zoning at these densities across the HUC 11 watershed. The intent of the septic density standard is to have communities develop or continue to use a comparable residential zoning density (note that density does not necessarily equate to lot size) that represents the total number of units that, if built, would not result in a degradation of groundwater quality by exceeding the 2 mg/L nitrate limit. Hence, a community may chose to have a range of lots sizes within the non-sewered areas of a Township that overall do not exceed the maximum number of new residential septic units that could be developed in these areas. To this end the, the Department encourages townships to consider center-based development, non-contiguous clustering, TDR and the development of local standards which establish a site specific developable building envelop in order to meet the septic density standards and better afford protection of natural systems and resources in a sustainable manner. Berkeley Township falls within seven (1) HUC11 watersheds. The following table indicates the residential density allowed under the 2 ppm nitrate limit.

Septic Density Comparison Chart: Berkeley Township

HUC-11 Name	Identification Number	2 mg/L nitrate limit
Barnegat Bay, Central Tributaries	0204301100	6 to 6.9 acres/ residential unit
Cedar Creek	02040301090	4 to 4.9 acres/ residential unit
Toms River (below Oak Ridge Parkway)	02040301080	4 to 4.9 acres/ residential unit
Atlantic Coast (Barnegat to Manasquan)	02040301910	>10 acres/ residential unit
Kettle Creek /Barnegat Bay North	02040301050	4 to 4.9 acres/ residential unit
Waretown Creek/ Barnegat Bay South	02040301120	5 to 5.9 acres/ residential unit
Atlantic Coast (Barnegat to Little Egg)	02040301920	>10 acres/ residential unit

Water Quality Management Plan - Sewer Service Area Mapping

The Department has adopted amendments to the Water Quality Management Planning rules at N.J.A.C. 7:15 that identify the conditions where the provision of new or extension existing of sewer service is not appropriate. The rules set forth a general policy which provides that large contiguous areas of environmentally sensitive resources, coastal planning areas 3, 4, and 5 within New Jersey's Coastal Zone Management Area, and areas that are prone to natural hazards such as flooding, wave action and erosion should not be included in sewer service areas. The strict limitations on the provision of new or expanded of sewer service in these areas is consistent with the Department's mandate to protect the ecological integrity and natural resources of New Jersey, including water quality, wetlands, and key habitats for threatened and endangered species and unique/ rare assemblages of plants.

Centralized wastewater is inappropriate for these areas because it subsidizes and otherwise encourages development in and around these natural resources in a manner that is inconsistent with their protection and the environmental protection mandate of the Department.

The criteria established by the regulations for delineating a sewer service area boundary provide that environmentally sensitive areas must be removed from the service area. The Department identifies environmentally sensitive areas that are not appropriate for sewer service area as any contiguous area of 25 or more acres in size that contains any or all of the following four features: State and or Federally listed threatened and endangered species habitats, Natural Heritage Priority Sites, Category One stream buffers, and wetlands.

Attachments:

- Map- Sewer Service Areas and Nitrate Dilution Concentrate Target by HUC11 in Berkeley Township

Environmental Constraints Analysis

The following section identifies those environmental constraints that should be considered by Berkeley Township in their planning efforts. These environmental constraints are divided into three sections - Regulated Constraints, Constraints to Avoid, and Constraints to Consider.

Regulated Environmental Constraints

Wetlands and Category One Waters are environmental constraints regulated by DEP. Berkeley Township should recognize these environmental constraints in their visioning and planning processes.

- Wetlands

Freshwater wetlands and transition areas (building set back buffers) are regulated by the Freshwater Wetlands Protection Act and the Rules at NJAC 7:7A. Wetlands subject to tidal influence are also afforded protection by the Wetlands Act of 1970. Berkeley Township has large areas of wetlands that are protected through both of these regulatory programs.

Wetlands are also commonly referred to as swamps, marshes, or bogs. However, many wetlands in New Jersey are forested and do not fit the classic picture of a swamp or marsh. Previously misunderstood as wastelands, wetlands are now recognized for their vital ecological and socioeconomic contributions. Wetlands contribute to the social, economic, and environmental health of our state in many ways:

- Wetlands protect surface waters by both physically and biologically filtering out chemicals, pollutants, and sediments that would otherwise clog and contaminate our waters.
- Wetlands attenuate runoff from heavy rains and snow melts, providing natural flood storage which can reduce flood levels and flow velocities.
- Wetlands slowly discharge surface waters and greatly contribute to the base flows of streams during periods of drought.
- Wetlands provide critical breeding, nursery, foraging and shelter habitats for the State's fisheries and wildlife, including species that are commercially and recreationally important as well as those listed as threatened or endangered.
- Wetlands and waterways provide high quality open space for recreation and tourism.

There are on-site activity limits on lands identified as wetlands. The Freshwater Wetlands Protection Act provides that most development related activities proposed in a wetland, including the removal of vegetation, the filling or discharge of any materials, the dredging, excavation or removal of soil, drainage or disturbance of the water level, the driving of pilings, and the placing of obstructions are regulated. The Act also provides that building buffers, or Transition Areas are established around most all types of wetlands. These restrictions may regulate activities up to 150 feet from the upland edge of a wetland.

Land Use/Land Cover data based on 2002 aerial photography identifies approximately 6,907.7 acres of wetlands in Berkeley Township. It should be noted that these wetlands are based on aerial photo interpretation and the estimation is **not** appropriate for use in determining the true extent of wetlands on a specific site.

- Category One (C1) Waterbodies & Associated Buffers

Category One designations are established in the Surface Water Quality Standards (NJAC 7:9B) – specifically in the tables in N.J.A.C. 7:9B-1.15(c) through (g) - for purposes of implementing the antidegradation policies set forth at N.J.A.C. 7:9b-1.5(d). These waters are designated to provide for their protection from measurable changes in water quality characteristics because of their clarity, color, scenic setting, other characteristics of aesthetic value, exceptional ecological significance (habitat, water quality, and biological functions), exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resource(s).

The Department of Environmental Protection recently adopted amendments to the Surface Water Quality Standards (SWQS) at N.J.A.C. 7:9B. The amendments at N.J.A.C. 7:9B-1.4 modify the definition of category one waters and add new definitions for Exceptional Ecological Significance, Exceptional Fisheries Resource(s), Exceptional Water Supply Significance, and HUC 14. The Department also adopted amendments to upgrade approximately 686 river miles to Category One antidegradation designation.

The Stormwater Management rule (NJAC 7:8) is implemented through the Department's Land Use regulations and local ordinances, and affects stormwater discharges to Category One waterways and their tributaries upstream within the same HUC14 subwatershed. The Stormwater Management rule also establishes a 300-foot Special Water Resource Protection Area (SWRPA) for major development proposed along Category One (C1) waters and certain tributaries.

The Flood Hazard Area Control Act (FHACA) rule (N.J.A.C. 7:13) establishes a minimum streamside setback, known as a riparian zone, of up to 300-foot riparian zone along C1 waters and their upstream tributaries within the HUC-14. This FHACA rule applies to any activity that requires approval in the rule. The Riparian Zone under the FHACA rule is the land and vegetation both within a regulated waterbody and within either 50 feet, 150 feet or 300 feet from the top of bank of a regulated waterbody. Given the many important ecological functions that a healthy riparian zone provides, adequately preserving such areas is essential to protecting New Jersey's natural resources and water supply.

For the purposes of this analysis, the Department is providing generalized information and mapping of C1 waterbodies and associated buffers. This analysis should be used only as a general planning tool. Specific development proposals may be affected, consistent with the information provided above.

The following waterbodies within or adjacent to Berkeley Township and are designated as Category One waters:

- Barnegat Bay and tributaries

300 foot buffers on this waterbody constitute approximately 4,270.27 acres in Berkeley Township.

- Floodprone areas

Flood Hazard Areas - The Flood Hazard Area Control Act rules at N.J.A.C. 7:13 regulates development within the floodplain and within the Riparian Zone (50 - 300 feet adjacent to the water). Under this rule all projects that are adjacent to a “regulated water” that is designated C1 or is upstream within the HUC 14 of a “regulated water”, regardless of whether they are mapped, require a Flood Hazard Area Control Act permit. Berkeley Township and should take the Flood Hazard Area Control Act and associated buffers into consideration when performing visioning requirement of Plan Endorsement. Additionally, Berkeley Township and Berkeley Township should update land-use ordinances accordingly to match the requirements of the Flood Hazard Area Control Act.

The map provided shows the FEMA flood map zones. The Federal Emergency Management Agency continually updates these maps, and Berkeley Township and its residents should refer to their website for current information. Additional information regarding FEMA’s Flood Insurance Rate Map (FIRM) follows the map provided. Please note that the area regulated by the Flood Hazard Area Control Act rule do not necessarily align with the FEMA flood map zones.

Attachments:

- Map—Wetlands, Streams, and C1 Streams
- Map—C1 Buffers
- Map—FEMA Flood Zones

Environmental Constraints to Avoid

Threatened and Endangered Species Habitat and Natural Heritage Priority Sites are geographically-identified environmental constraints prioritized for protection by DEP's mandate to protect the ecological integrity and natural resources of New Jersey. DEP recommends avoidance of these areas, to the extent possible, in order to protect these ecosystems from degradation and destruction.

While Threatened and Endangered Species Habitat and Natural Heritage Priority Sites are not specifically regulated as such, the species and sites that are the basis for this information are considered in several DEP regulatory and planning programs - such as the Freshwater Wetlands Program, Water Quality Management Planning, and the Flood Hazard Area Control Act rule.

- **Threatened & Endangered Species Habitat**

The New Jersey Endangered Species Conservation Act was passed in 1973 and directed the New Jersey Department of Environmental Protection (DEP) to protect, manage and restore the state's endangered and threatened species. The DEP Endangered and Nongame Species Program (ENSP) has since become the voice for more than 400 species of wildlife in New Jersey, with success stories related to the Bald Eagle, the Peregrine Falcon, the Pine Barrens Treefrog, the Osprey, and others. There are currently 73 endangered and threatened wildlife species in New Jersey. Wildlife professionals within DEP's Endangered and Nongame Species Program oversee research, conservation and protection of rare wildlife species such as the bog turtle, great blue heron, piping plover, bobcat, and other animals that are struggling to survive here in New Jersey.

ENSP has developed the Landscape Project to identify and systemically map the habitat most critical for New Jersey's fish and wildlife populations. This tool is being used to gauge healthy ecosystems and help identify areas appropriate for protection while giving citizens and local government officials valuable scientific information about their municipalities. The Landscape Project ranks habitat patches by the status of the species present, as follows:

- **Rank 5** is assigned to patches containing one or more occurrences of at least one wildlife species listed as endangered or threatened on the Federal list of endangered and threatened species.
- **Rank 4** is assigned to patches with one or more occurrences of at least one State endangered species.
- **Rank 3** is assigned to patches containing one or more occurrences of at least one State threatened species.

There are approximately 15,367.0 acres of threatened and endangered species habitat in Berkeley Township. The actual acres of threatened and endangered species habitat may be slightly less than the total calculated since some areas are may be valued as multiple landscape types. This habitat supports a wide range of species, from the Great Blue Heron, Least Tern, Piping Plover, Cooper's Hawk, Grasshopper Sparrow, Savannah Sparrow, Corn Snake, Common Tern, Snowy Egret, Glossy Ibis, Northern Diamond Back Terrapin, Pine Barrens Treefrog, Barred Owl, Bobcat and Timber Rattle Snake,

among others. The attached *Threatened & Endangered Species Habitat map* shows the extent of habitat in Berkeley Township (including habitat for priority species – Rank 2 – that are discussed below in the ‘Environmental Constraints to Consider’ section). This data is based on Landscape Project Version 2.1 mapping that the Department released in the spring of 2008.

- **Natural Heritage Priority Sites**

Through its Natural Heritage Database, the DEP Office of Natural Lands Management (ONLM) identifies critically important areas to conserve New Jersey’s biological diversity, with particular emphasis on rare plant species and ecological communities. The database provides detailed information on rare species and ecological communities to planners, developers, and conservation agencies for use in resource management, environmental impact assessment, and both public and private land protection efforts. Using the database, ONLM has identified 343 Natural Heritage Priority Sites (NHPS), representing some of the best remaining habitat for rare species and rare ecological communities in the state. In addition, each NHPS includes a Biodiversity Rank according to its significance for biological diversity using a scale developed by The Nature Conservancy, the network of Natural Heritage Programs and the New Jersey Natural Heritage Program. The global biodiversity significance ranks range from B1 to B5. The specific definitions for each rank for NHPS in Berkeley Township are as follows:

- B2 - Very high significance on a global level, such as the most outstanding occurrence of any ecological community. Also includes areas containing other occurrences of elements that are critically imperiled globally, a good or excellent occurrence of an element that is imperiled globally, an excellent occurrence of an element that is rare globally, or a concentration (4+) of good occurrences of globally rare elements or viable occurrences of globally imperiled elements.

There are two (2) NHPS located within Berkeley Township , as follows:

SITE NAME	DESCRIPTION	BIODIVRANK	BIODIVCOMM
Island Beach Macrosite	Large expansive beaches, dunes, and wetlands on and adjacent to Island Beach State Park and the northern tip of Long Beach Island.	B2	This site contains populations of several globally rare and state endangered and threatened animals, plants and natural communities.
Crossley	Pitch Pine uplands and lowlands. Disturbed areas include gravel pits and abandoned RR ROW. Both these disturbed habitats important for rare species.	B2	Two Critically imperiled plants; plus globally rare plants and State significant animals.

Attachments:

- Map—Threatened, Endangered & Priority Species Habitat and Natural Heritage Priority Sites

Environmental Constraints to Consider

Groundwater Recharge Areas, Wellhead Protection Areas, and Priority Species Habitat are geographically-identified environmental constraints recognized as important for the protection of water quality and biodiversity of New Jersey. DEP recommends avoidance of these areas, to the extent possible, in order to minimize the impact to water quality and species habitat.

- **Groundwater Recharge Areas**

Groundwater recharge areas are those sites where a high volume of precipitation and surface waters infiltrate into the soil and act to resupply surface and ground waters. Protection of these areas from over-development, and addressing stormwater runoff for these areas, directly affects the water quality of both drinking water supplies and water-based habitats.

The New Jersey Geological Survey (NJGS) has developed ground water recharge data sets using several data factors, such as land use patterns, impervious surface amounts, soil types, precipitation, and evaporation rates, among others, to calculate the amount of water each area of the state normally contributes to the underlying aquifers. The data are reported and mapped in several standard categories, in units of inches per year.

For the State Planning process, the original ground water recharge data, calculated for each Watershed Management Area, were converted to a volume-based rating, and then grouped into three classes to simplify further analysis, based on the percent contribution to the total recharge amounts. Those undeveloped areas contributing the highest one-third of the recharge volume in each Watershed Management Area were selected as high priority for protection. The final Ground Water Recharge layer used for this analysis includes all undeveloped areas in the state that were identified as contributing the highest one-third of the recharge volume in the appropriate Watershed Management Area.

There are approximately 7,593.49 acres of high volume groundwater recharge areas located within Berkeley Township.

- **Well Head Protection Areas**

Areas of land surrounding public community wells, known as Well Head Protection Areas, from which contaminants may move through the ground to be withdrawn in water taken from the well, have been delineated. Protection of the public health, safety and welfare through protection of ground water resources, ensures a supply of safe and healthful drinking water.

Well Head Protection Areas (WHPA) are mapped areas calculated around a Public Community Water Supply (PCWS) well in New Jersey that delineates the horizontal extent of ground water captured by a well pumping at a specific rate over a two-, five-, and twelve-year period of time for confined wells. The confined wells have a fifty foot radius delineated around each well that defines the well head protection area, which must be acquired and controlled by the water purveyor in accordance with Safe Drinking Water Regulations (see NJAC 7:10-11.7(b)1).

WHPA delineations are conducted in response to the Safe Drinking Water Act Amendments of 1986 and 1996 as part of the Source Water Assessment Program

(SWAP). The delineations are the first step in defining the sources of water to a public supply well. Within these areas, potential contamination will be assessed and appropriate monitoring will be undertaken as subsequent phases of the NJDEP SWAP. WHPA delineation methods are described in ["Guidelines for Delineation of Well Head Protection Areas in New Jersey"](#) .

Updates for Public Community Water Supply Well Head Protection Areas are described in [Well Head Delineations Updates List](#). A complete list of individual

Public Community Water Supply Well Head Protection Area delineations are described in [Well Head Delineations List](#).

Within Berkeley Township there is approximately:

- 451.80 total acres of Tier One WHPA
- 978.46 total acres of Tier Two WHPA
- 2,946.30 total acres of Tier Three WHPA

- **Priority Species Habitat**

Similar to threatened and endangered species, the DEP Endangered Non-Game Species Program also considers "priority species." Priority Species are nongame wildlife that are considered to be species of *special concern* as determined by a panel of experts. These species warrant special attention because of some evidence of decline, inherent vulnerability to environmental deterioration, or habitat modification that would result in their becoming a Threatened species. This category would also be applied to species that meet the foregoing criteria and for which there is little understanding of their current population status in the state. The Landscape Project ranks habitat patches by the status of the species present, as follows:

- **Rank 2** is assigned to patches containing one or more occurrences of at least one non-listed State priority species.

There are approximately 2,122.99 acres of Priority Species Habitat located within Berkeley Township. Mapping showing Priority Species Habitat is included on the *Threatened & Endangered Species Habitat map*, as discussed earlier in the 'Environmental Constraints to Avoid' section.

- **Total Maximum Daily Loads (TMDL)**

In accordance with Section 303(d) of the Federal Clean Water Act (CWA) (33 U.S.C. 1315(B)), the State of New Jersey is required biennially to prepare and submit to the USEPA a report that identifies waters that do not meet or are not expected to meet SWQS after implementation of technology-based effluent limitations or other required controls. This report is commonly referred to as the 303(d) List. In accordance with Section 305(b) of the CWA, the State of New Jersey is also required biennially to prepare and submit to the USEPA a report addressing the overall water quality of the State's waters. This report is commonly referred to as the 305(b) Report or the Water Quality Inventory Report. The Integrated Water Quality Monitoring and Assessment Report combine these two assessments and assigns waterbodies to one of five sublists on the Integrated List of Waterbodies. Sublists 1 through 4 include waterbodies that are generally unimpaired

(Sublist 1 and 2), have limited assessment or data availability (Sublist 3), or are impaired due to pollution rather than pollutants or have had a TMDL or other enforceable management measure approved by EPA (Sublist 4). Sublist 5 constitutes the traditional 303(d) list for waters impaired or threatened by one or more pollutants, for which a TMDL may be required.

Therefore, in accordance with Section 305(b) and 303(d) of the Federal Clean Water Act (CWA), the State of New Jersey, Department of Environmental Protection (Department) is required to assess the overall water quality of the State's waters and identify those waterbodies with a water quality impairment for which TMDLs may be necessary. A TMDL is developed to identify all the contributors of a pollutant of concern and the load reductions necessary to meet the Surface Water Quality Standards (SWQS) relative to that pollutant. The Department fulfills its assessment obligation under the CWA through the Integrated Water Quality Monitoring and Assessment Report, which includes the Integrated List of Waterbodies (303(d) list) and is issued biennially. The *Integrated List of Waterbodies* is adopted by the Department as an amendment to the Statewide Water Quality Management Plan, as part of the Department's continuing planning process pursuant to the Water Quality Planning Act at N.J.S.A.58:11A-7 and the Statewide Water Quality Management Planning rules at N.J.A.C. 7:15-6.4(a).

Total Maximum Daily Loads that encompass Berkeley Township, Ocean County:

TMDL Name	Parameter	Percent Reduction	Document	EPA Approval	Affected WQMP
Barneгат Bay	Total Coliform	40%	Fourteen TMDLs for Total Coliform to Address Shellfish-Impaired Waters in Watershed Management Area 13: Atlantic Coastal Water Region	September 27, 2006	Ocean County WQMP
Cedar Creek Estuary	Total Coliform	48%			
Toms River Estuary	Total Coliform	74%			

Three TMDLs requiring 40, 48 and 74 percent, respectively of load reduction in pathogens are part of the drainage area of Berkeley Township. For a detailed explanation, please refer to the document entitled, *“Fourteen Total Maximum Daily Loads for Total Coliform to Address Shellfish-Impaired Waters in Watershed Management Area 13 Atlantic Coastal Water Region”*. Although the TMDL document serves as an amendment to multiple Water Quality Management Plans (WQMPs), Berkeley Township falls within the purview of the Ocean County WQMP. The Department's TMDL Reports may be downloaded from the Division of Watershed Management's web site at www.state.nj.us/dep/watershedmgt/tmdl.htm.

A TMDL represents the assimilative or carrying capacity of a waterbody, taking into consideration point and nonpoint sources of pollutants of concern, natural background, and surface water withdrawals. A TMDL quantifies the amount of a pollutant a water body can assimilate without violating a state's water quality standards and allocates that load capacity to known point and nonpoint sources in the form of waste load allocations (WLAs) for point sources, load allocations (LAs) for nonpoint sources, a margin of safety

(MOS) and, as an option, a reserve capacity (RC). The TMDLs for Berkeley Township, Ocean County are nonpoint source driven.

The Department recognizes that TMDLs alone are not sufficient to restore impaired stream segments. The TMDL establishes the required pollutant reduction targets while the implementation plan identifies some of the regulatory and non-regulatory tools to achieve the reductions, matches management measures with sources, and suggests responsible entities for non-regulatory tools. This provides a basis for aligning available resources to assist with implementation activities. Projects proposed by the State, local government units and other stakeholders that would implement the measures identified within the impaired watershed are a priority for available State (for example, CBT) and federal (for example, 319(h)) funds. In addition, the Department's ongoing watershed management initiative will develop detailed watershed restoration plans for impaired stream segments in a priority order that will identify more specific measures to achieve the identified load reductions. Urban and residential land use sources must be the focus for implementation for this TMDL and are expected to be addressed primarily by stormwater regulation via the municipality's MS4 permit.

Short-term and Long-term Management Strategies

Short term management measures include projects recently completed, underway or planned that are designed to address the targeted impairment. Whereas long term strategies include source trackdown as well as selection and implementation of specific management measures that will address the identified sources. The Department recognizes that TMDLs alone are not sufficient to restore impaired water bodies. The TMDL establishes the required nutrient reduction target and provides the regulatory framework to effect these reductions. Overall the TMDL implementation plan for New Jersey's Coastal Pathogen TMDLs recommend addressing goose management, manure management for livestock, adoption of pollution prevention measures as articulated in the New Jersey Clean Marinas Program and supports municipalities to seek federal grants under the Clean Vessel Act.

Attachments:

- Map - Groundwater Recharge Areas and Well Head Protection Areas

Contaminated Areas Considerations

All New Jersey municipalities can be home to contaminated sites, whether the contamination comes from industrial, agricultural, retail, or even residential sources. The information provided in this section is intended to help municipal officials identify known contaminated areas and incorporate consideration of these areas into planning efforts. The existence of a contaminated area does not necessarily mean that it is inappropriate for development or redevelopment. Nonetheless, the severity of the contamination, the potential for remediation, and the potential impact on human health must be considered before development or redevelopment plans are underway.

Known Contaminated Sites List

The [Known Contaminated Sites in New Jersey Reports](#) was recently updated in March 2008, and it represents the first revision in a move from a static report towards a dynamic report, providing real-time contaminated site status. The new approach to reporting contaminated sites involves three reports where past reporting has involved a single report. The three reports are: Active Sites with Confirmed Contamination, Pending Sites with Confirmed Contamination, and Closed Sites with Confirmed Contamination. The reports consider ALL cases and activities at a site. Detail information describing the case history at a site, including active cases, is available through the Data Miner reporting tool using the Site Remediation Program Interest (PI) Number provided in the report.

- Active Sites are those sites having one or more active case with any number of Pending and Closed cases.
- Pending Sites are those sites having one or more pending cases, no active cases, and any number of closed cases.
- Closed sites are those sites having only closed cases. Sites in this category have no active or pending cases.

There are thirty-two (32) active known contaminated sites in Berkeley Township.

Active Sites					
Site ID	PI Number	County	Municipality	PI Name	Address
187617	246614	Ocean	Berkeley Twp	102 HOLLY LANE	102 HOLLY LN
358150	442859	Ocean	Berkeley Twp	11 COVE DRIVE	11 COVE DR
362833	448137	Ocean	Berkeley Twp	293 GRAND CENTRAL PARKWAY	293 GRAND CENTRAL PKWY
374344	463879	Ocean	Berkeley Twp	524 BIRCH STREET	524 BIRCH ST
363215	448747	Ocean	Berkeley Twp	56 HARLEY BOULEVARD	56 HARLEY BLVD
189637	249186	Ocean	Berkeley Twp	620 RIVERSIDE DRIVE	620 RIVERSIDE DR
13530	010554	Ocean	Berkeley Twp	A KURNEL & SONS	821 RT 9
13529	031526	Ocean	Berkeley Twp	BAYVILLE RUSSO	399 RT 9
41341	000027	Ocean	Berkeley Twp	BAYVILLE WILLIAM PENN	RT 9 & STATION RD
105070	197640	Ocean	Berkeley Twp	BERKELEY PLAZA	417 RT 9

				SHOPPING CENTER	
24719	G000008858	Ocean	Berkeley Twp	BERKELEY TOWNSHIP WATER CO BAY WELL 2	SHERMAN AVE & BELL ST
24718	033748	Ocean	Berkeley Twp	BERKELEY WATER CO	98 RT 9
67260	G000011561	Ocean	Berkeley Twp	BROOKS AVENUE GROUND WATER CONTAMINATION	BROOKS AVE
66696	G000008866	Ocean	Berkeley Twp	BUTLER BOULEVARD GROUND WATER CONTAM	BUTLER BLVD
123739	162708	Ocean	Berkeley Twp	COASTAL	941 RT 9
38432	025188	Ocean	Berkeley Twp	COTY MARINE	301 RT 37
3243	005862	Ocean	Berkeley Twp	CUMBERLAND FARMS 2904	RT 9 & MORRIS BLVD
3250	006705	Ocean	Berkeley Twp	CUMBERLAND GULF 126467	10 ATLANTIC CITY BLVD
3247	011230	Ocean	Berkeley Twp	DELTA	385 RT 9
66146	G000002832	Ocean	Berkeley Twp	DENZER & SCHAFER X RAY COMPANY	186 HICKORY LN
39067	030392	Ocean	Berkeley Twp	DOUBLE TROUBLE STATE PARK	PINEWALD KESWICK RD
85914	G000011658	Ocean	Berkeley Twp	HARBORAGE AVE & DOCKAGE RD GW CONTAM	HARBORAGE AVE & DOCKAGE RD
13478	008422	Ocean	Berkeley Twp	HESS STATION 30307	RT 9 & JFK BLVD
66463	G000005629	Ocean	Berkeley Twp	HOLIDAY CITY AT BERKELEY	730 JAMAICA BLVD
3240	003062	Ocean	Berkeley Twp	LACEY GARAGE	MULE RD & DOVER RD
45253	000406	Ocean	Berkeley Twp	MORWEB INC	72 RT 9
120119	003055	Ocean	Berkeley Twp	OCEAN COUNTY AIRPARK HANGAR	RT 530 & MULE RD
85915	G000011669	Ocean	Berkeley Twp	PRINCESS LAUNDROMAT & DRY CLEANING	RT 9 S
3236	002393	Ocean	Berkeley Twp	ROBERT J MILLER AIRPORT	RT 530 W
22212	017835	Ocean	Berkeley Twp	S.B.A HYDRAUICS	252 RT 9
66584	G000008562	Ocean	Berkeley Twp	SOUTH BRUNSWICK ASPHALT COMPANY	GLADNEY AVE
67306	G000011677	Ocean	Berkeley Twp	WESTERN BOULEVARD GRD WTR CONTAMINATION	WESTERN BLVD & MANHATTAN & HOOVER AVE
187617	246614	Ocean	Berkeley Twp	102 HOLLY LANE	102 HOLLY LN
358150	442859	Ocean	Berkeley Twp	11 COVE DRIVE	11 COVE DR
362833	448137	Ocean	Berkeley Twp	293 GRAND CENTRAL	293 GRAND CENTRAL PKWY

				PARKWAY	
374344	463879	Ocean	Berkeley Twp	524 BIRCH STREET	524 BIRCH ST
363215	448747	Ocean	Berkeley Twp	56 HARLEY BOULEVARD	56 HARLEY BLVD

There is one (1) pending known contaminated sites in Berkeley Township.

Pending Sites					
Site ID	PI Number	County	Municipality	PI Name	Address
55140	025224	Ocean	Berkeley Twp	ALL FOUR SEASONS RENTAL CENTER	82 RT 9

There are eighty-one (81) closed known contaminated sites in Berkeley Township.

Closed Sites					
Site ID	PI Number	County	Municipality	PI Name	Line1 Address
148747	193595	Ocean	Berkeley Twp	100 20TH AVENUE	100 20TH AVE
82364	G000025102	Ocean	Berkeley Twp	108 ROANOKE DRIVE	108 ROANOKE DR
126529	166973	Ocean	Berkeley Twp	11 TRINIDAD AVENUE	11 TRINIDAD AVE
84043	G000037415	Ocean	Berkeley Twp	12 DERBY LANE	12 DERBY LN
164062	215742	Ocean	Berkeley Twp	120 NORTH STOTT STREET	120 N STOTT ST
84351	G000038946	Ocean	Berkeley Twp	126 SHERMAN AVE	126 SHERMAN AVE
84395	G000039119	Ocean	Berkeley Twp	13 ARIMA COURT	13 ARIMA CT
82599	G000026975	Ocean	Berkeley Twp	13 VENEZIA STREET	13 VENESIA ST
126488	166922	Ocean	Berkeley Twp	130 VEEDER LANE	130 VEEDER LN
84453	G000039598	Ocean	Berkeley Twp	14 FREDERICKSTED ST	14 FREDERICKSTED ST
165906	218036	Ocean	Berkeley Twp	15 STATION ROAD	15 STATION RD
126031	166406	Ocean	Berkeley Twp	15 TRINIDAD AVENUE	15 TRINIDAD AVE
92028	129999	Ocean	Berkeley Twp	16 HAWK AVE	16 HAWK AVE
83295	G000034023	Ocean	Berkeley Twp	17 EATON RD	17 ETON RD
81036	G000010360	Ocean	Berkeley Twp	175 CHELSEA AVENUE	175 CHELSEA AVE
178899	234425	Ocean	Berkeley Twp	2 BROWNING AVENUE	2 BROWNING AVE
85466	G000044495	Ocean	Berkeley Twp	200 CEYLON AVE	200 CEYLON AVE
88031	G000061910	Ocean	Berkeley Twp	203 23RD AVENUE	203 23RD AVE
84379	G000039024	Ocean	Berkeley Twp	205 SUNSET DR S	205 S SUNSET DR
83703	G000036010	Ocean	Berkeley Twp	206 MILL CREEK DR	206 MILL CREEK DR
38366	G000059741	Ocean	Berkeley Twp	207 CHELSEA AVE	207 CHELSEA AVE
368939	456414	Ocean	Berkeley Twp	215 BUTLER BOULEVARD	215 BUTLER BLVD
84104	G000037669	Ocean	Berkeley Twp	232 SANDLEWOOD DR	232 SANDLEWOOD DR
83967	G000037117	Ocean	Berkeley Twp	235 DOGWOOD DR	235 DOGWOOD DR
128296	169785	Ocean	Berkeley Twp	25 BROWNING AVENUE	25 BROWNING AVE

220587	288010	Ocean	Berkeley Twp	25 TORTOLA STREET	25 TORTOLA ST
119288	157059	Ocean	Berkeley Twp	250 CAPE MAY AVENUE	250 CAPE MAY AVE
119404	157196	Ocean	Berkeley Twp	250 POINT PLEASANT AVENUE	250 POINT PLEASANT AVE
229712	300636	Ocean	Berkeley Twp	255 SERPENTINE DRIVE	255 SERPENTINE DR
221073	288721	Ocean	Berkeley Twp	260 BERKELEY DRIVE	260 BERKELEY DR
224365	292852	Ocean	Berkeley Twp	264 CENTRAL BOULEVARD	264 CENTRAL BLVD
167402	220074	Ocean	Berkeley Twp	272 ROOSEVELT AVENUE	272 ROOSEVELT AVE
87098	G000060692	Ocean	Berkeley Twp	285 ROUTE 9	285 RT 9
353813	283880	Ocean	Berkeley Twp	290 ROUTE 9	290 RT 9 S
191699	251825	Ocean	Berkeley Twp	306 GRANK CENTRAL PARKWAY	306 GRAND CENTRAL PKWY
341852	422815	Ocean	Berkeley Twp	309 DOREY LANE	309 DORSEY LN
83310	G000034146	Ocean	Berkeley Twp	317 CENTRAL BOULEVARD	317 CENTRAL BLVD
83710	G000036033	Ocean	Berkeley Twp	320 DORSEY LN	320 DORSEY LN
169868	223225	Ocean	Berkeley Twp	34 LOCKER STREET	34 LOCKER ST
84693	G000040901	Ocean	Berkeley Twp	344 WESTERN BLVD	344 WESTERN BLVD
173677	227849	Ocean	Berkeley Twp	35 BROWNING AVENUE	35 BROWNING AVE
168204	221089	Ocean	Berkeley Twp	359 ARLINGTON AVENUE	359 ARLINGTON AVE
180492	236395	Ocean	Berkeley Twp	36 LOCKER STREET	36 LOCKER ST
163681	214486	Ocean	Berkeley Twp	37 LOCKER STREET	37 LOCKER ST
83078	G000031132	Ocean	Berkeley Twp	39 CARLISLE ROAD	39 CARLISLE RD
229906	300865	Ocean	Berkeley Twp	393 WESTERN BOULEVARD	393 WESTERN BLVD
257402	329696	Ocean	Berkeley Twp	407 LAUREL STREET	407 LAUREL ST
70683	G000033283	Ocean	Berkeley Twp	409 ARLINGTON AVENUE NORTH	409 ARLINGTON AVE
228676	G000062766	Ocean	Berkeley Twp	41 LAUREL AVENUE	41 LAUREL AVE
177016	231984	Ocean	Berkeley Twp	456 HARDING AVENUE	456 HARDING AVE
84485	G000039716	Ocean	Berkeley Twp	467 WHEATON AVE	467 WHEATON AVE
122723	161483	Ocean	Berkeley Twp	470 CLIFTON AVENUE	470 CLIFTON AVE
129933	172552	Ocean	Berkeley Twp	503 TRENTON AVENUE	503 TRENTON AVE
153730	202837	Ocean	Berkeley Twp	52 HARLEY BOULEVARD	52 HARLEY BLVD
84511	G000039911	Ocean	Berkeley Twp	53 MORRIS BLVD	53 MORRIS BLVD
85759	G000060323	Ocean	Berkeley Twp	607 RIVERSIDE DR	607 RIVERSIDE DR
365437	G000060432	Ocean	Berkeley Twp	609 MAPLE ST	609 MAPLE ST
85313	G000043745	Ocean	Berkeley Twp	611 LAUREL STREET	611 LAUREL ST
83737	G000036210	Ocean	Berkeley Twp	615 BAY BLVD	615 BAY BLVD

81925	G000021602	Ocean	Berkeley Twp	615 HOLLY BOULEVARD	615 HOLLY BLVD
154276	203532	Ocean	Berkeley Twp	621 BAY BOULEVARD	621 BAY BLVD
68903	G000027669	Ocean	Berkeley Twp	63 CASTLE HARBOR DRIVE	63 CASTLE HARBOR DR
85166	G000043030	Ocean	Berkeley Twp	7 SEABRIGHT AVENUE	7 SEABRIGHT AVE
84455	G000039601	Ocean	Berkeley Twp	727 ATLANTIC CITY BLVD	727 ATLANTIC CITY BLVD
85600	G000059738	Ocean	Berkeley Twp	78 CHARLES STREET	78 CHARLES ST
368288	455576	Ocean	Berkeley Twp	78 SHOREWOOD DRIVE	78 SHOREWOOD DR
170869	224571	Ocean	Berkeley Twp	809 MAIN STREET	809 MAIN ST
219093	285995	Ocean	Berkeley Twp	81 MORRIS BOULEVARD	81 MORRIS BLVD
164030	214935	Ocean	Berkeley Twp	824 MAIN STREET	824 MAIN ST
63262	026184	Ocean	Berkeley Twp	BAYVIEW CONUALESCENT CENTER INC	395 LAKESIDE BLVD
3241	030276	Ocean	Berkeley Twp	BERKELEY TWP PUBLIC WORKS GARAGE	627 PINEWALD KESWICK RD
163880	214738	Ocean	Berkeley Twp	CAPTAINS GALLEY	2101 CENTRAL AVE
81114	G000011284	Ocean	Berkeley Twp	CASTLE WOOD CRAFT COMPANY	150 RT 9
3254	004021	Ocean	Berkeley Twp	CLARA B WORTH SCHOOL	57 CENTRAL PKWY
191564	251661	Ocean	Berkeley Twp	HICKORY LANE PROPERTY	HICKORY LN
76682	G000006264	Ocean	Berkeley Twp	JCP&L COMPANY MOTTS CORNER SUBSTATION	RT 9 & KORMAN RD
16826	014281	Ocean	Berkeley Twp	OCEAN CNTY UTILITIES AUTH CPS14	134 CHELSEA AVE
14575	014280	Ocean	Berkeley Twp	OCEAN CNTY UTILITIES AUTH CWPCF	501 HICKORY LN
82924	G000029659	Ocean	Berkeley Twp	ROUTE 37 & SUNSET DRIVE	RT 37 & SUNSET DR
3246	004743	Ocean	Berkeley Twp	SHELL SERVICE STATION 138293	455 RT 9
91349	008738	Ocean	Berkeley Twp	WRIGHT EXCAVATING INC	120 MANTOLOKING RD

The Known Contaminated Sites in New Jersey report (<http://www.nj.gov/dep/srp/kcsnj/>) is produced by NJDEP in response to N.J.S.A. 58:10-23.16-17 that requires preparation of a list of sites affected by hazardous substances. It also satisfies the Site Remediation Program's obligations under the New Jersey New Residential Construction Off-Site Conditions Disclosure Act (N.J.S.A 46:3C1 et seq.).

Known Contaminated Sites - Classification Exception Areas (CEA)

Classification Exception Areas are DEP designated areas of groundwater contamination meeting certain criteria and associated with Known Contaminated Sites or sites on the Site Remediation Program (SRP) Comprehensive Site List. CEAs are institutional controls in geographically defined areas within which the New Jersey Ground Water Quality Standards (NJGWQS) for specific contaminants have been exceeded. When a CEA is designated for an area, the constituent standards and designated aquifer uses are suspended for the term of the CEA. A public understanding of where groundwater is known to be contaminated can help prevent inappropriate well placement, preventing potential health risks and can minimize unintended contaminant plume migration. Contaminants of concern within a CEA record are described in one of two ways, either in a field named for the contaminant, e.g., benzene; or listed in a general contaminant field, e.g., VO.

The Department currently identifies five (5) CEAs within Berkeley Township

- Robert J. Miller Airpark- Avgas (also a CEA-VO)
- Robert J. Miller Airpark- Hangar (also a CEA-VO)
- Bayville Automotive (also a CEA-VO)
- Eagle Speed Oil & Lube (also a CEA-VO)
- Gulf Service Station #2904 (also a CEA-VO)

For further information about Classification Exception Areas:

http://www.state.nj.us/dep/srp/guidance/cea/cea_guide.htm

Known Contaminated Site- Current Known Extent Areas (CKE)

Currently Known Extent of ground water pollution or CKE areas are geographically defined areas within which the local ground water resources are known to be compromised because the water quality exceeds drinking water and ground water quality standards for specific contaminants. Historically, a number of the CKEs have also been identified as Well Restriction Areas (WRAs). The regulatory authority for developing CKEs is in N.J.A.C. 7:1J, entitled Processing of Damage Claims Pursuant to the Spill Compensation and Control Act. CKEs are used by NJDEP staff, water purveyors, and local officials to make decisions concerning appropriate treatment and/or replacement of contaminated drinking water supplies.

The CKE areas, as shown, are intended to provide information to the public about contaminated ground water areas in the state. Unless precautionary measures are taken to protect potable users, well installation should be avoided. This information is being made available so informed decisions can be made on well location, design, or treatment before wells are proposed, permitted, and installed.

The Department is currently engaged in the reassessment and investigation of existing CKEs; however, it is important to note that CKEs are approximations of the actual aerial extent of ground water contamination and the boundaries presented here may change over time as new information is developed. At this time, the records of the CKEs database used for this report do not include a list of the specific ground water contaminants. Also, it should be noted that CKE areas might overlap with other CKEs and Classification Exception Areas (CEAs). Revisions and additions will be used to update the CKE database as new information is received and processed.

For further information contact NJDEPs Site Remediation Programs (SRP) Bureau of Site Management (BSM) the lead program, for CKE case oversight. Contact information for SRPs lead program can be acquired at www.state.nj.us/dep/srp.

The Department currently identifies three (3) CKEs within Berkeley Township:

- Butler Boulevard
- Bayville Russo Gas
- Harborage Ave & Dockage R

Landfills

NJDEP maintains a list of landfills in the state, including active facilities, properly closed facilities, those being remediated with public funds, those proposed for redevelopment, and inactive landfills. The state has a landfill strategy to notify and work with owners or other responsible parties to bring into compliance inactive landfills that are out of compliance with closure requirements. Two organizations in NJDEP oversee landfill permitting, remedial, and closure work: the vast majority of operating and inactive landfills come under the jurisdiction of the Solid and Hazardous Waste Program in the Department's Environmental Regulation Program. Those landfills that are being remediated with public funding are overseen by the Site Remediation Program, as are sites that are proposed for redevelopment with any component of future use that might directly impact human health, including industrial, commercial or residential use.

Landfills often represent some of the largest tracts of potentially developable land that a municipality and/or county can include in its smart growth and planning efforts. Turning a former landfill into a beneficial use may then enable the protection of other sensitive areas in a community. Innovative uses of landfills include passive open space, active open space, renewable energy "farms" for wind turbines, gas collection and use, and/or solar collection, shopping centers, and mixed use developments.

- The Department currently identifies one Solid Waste Landfill in Berkeley Township- the Berkeley Township Landfill

For questions regarding the redevelopment of landfill sites, please contact the Office of Brownfield Re-Use at (609) 292-1251.

Attachments:

- Map - Known Contaminated Sites (Note: This map does not show the extent of contamination, therefore a buffer should be placed around the site for planning purposes.)

Preserved Lands and Historic Resources

Open space preservation helps to protect New Jersey's rich natural, historic, and cultural heritage. It ensures that animal and plant habitats are protected and that areas of scenic beauty and agricultural importance are preserved. It safeguards streams and water supplies and provides opportunities to enjoy the outdoors. Open space preservation lies at the core of the quality of life of New Jersey's communities - from the most urbanized cities to the most remote rural areas of the state. Besides enhancing the quality of life, protecting open space can provide economic benefits. It can help a community avoid the costly mistakes of misusing available resources. Protected open space usually raises the taxable value of adjacent properties and is less costly to maintain than the infrastructure and services required by residential development. Even taking into account the increased tax base that results from development, open space usually proves easier on the municipal budget in the long-run.

Historic preservation is the identification, evaluation, and protection of historic and archaeological resources so that they continue to play an integral, vibrant role in their communities. New Jersey's historic properties and the environment in which they exist are irreplaceable assets that contribute to the quality of life that residents enjoy and expect. Historic properties are the physical links to our past, providing meaning to the present and continuity with the future. They are the physical records of the events and people that shaped New Jersey's history. Historic properties add visual and intellectual spirit to the physical environment that New Jersey residents experience daily.

Preserved Lands

Based on the Department's records, the following two tables represent all of the preserved open space lands located in Berkeley Township. The total acreage of these lands is approximately 10,684.16 acres for State and Locally owned open space. DEP recognizes that its records may be incomplete or incorrect, and appreciates all assistance in keeping its records up-to-date.

State Owned Lands

BLOCK	LOT	NAME	APPROX. ACRES
		CROSSLEY	351.99
4,304	6	CROSSLEY	56.92
		CROSSLEY	70.76
		CROSSLEY	106.20
		CROSSLEY	9.11
8	5.01	CROSSLEY	21.50
4,304	2	CROSSLEY	0.16
12	3	CROSSLEY	542.11
		CROSSLEY	86.92
		CROSSLEY	4.67
3	1	CROSSLEY	169.90
1	3	GREENWOOD FOREST	16.64
1	6	GREENWOOD FOREST	66.76
1	5	GREENWOOD FOREST	69.42
1	4	GREENWOOD FOREST/PASADENA	25.00

1	12	GREENWOOD FOREST	116.45
18	1	CROSSLEY	572.79
1	2	GREENWOOD FOREST	5.60
1	12.02	GREENWOOD FOREST	86.12
1	1	GREENWOOD FOREST	15.76
1	7	GREENWOOD FOREST	32.76
1	9	GREENWOOD FOREST	9.97
2950	8	GREENWOOD FOREST	0.08
1	8	GREENWOOD FOREST	1.81
23	28	DOUBLE TROUBLE	459.28
1	13.01	GREENWOOD FOREST	14.06
15	5	DOUBLE TROUBLE	454.00
2950	9	GREENWOOD FOREST	0.33
23	1	DOUBLE TROUBLE	989.04
22	1	DOUBLE TROUBLE	748.79
15	7	DOUBLE TROUBLE	34.56
22	1.01	DOUBLE TROUBLE	465.20
2675	3	DOUBLE TROUBLE	0.68
2675	2	DOUBLE TROUBLE	0.51
23	5	DOUBLE TROUBLE	144.47
1719	242.01	ISLAND BEACH NORTHERN	0.80
1719	242	ISLAND BEACH NORTHERN	0.54
1719	2478	ISLAND BEACH NORTHERN	0.11
		ISLAND BEACH NORTHERN	663.48
22	3	DOUBLE TROUBLE	63.03
22	5	DOUBLE TROUBLE	166.28
23.07	1	DOUBLE TROUBLE	94.44
22	2	DOUBLE TROUBLE	31.02
2600	26	DOUBLE TROUBLE	0.36
2600	29	DOUBLE TROUBLE	1.07
2600	27	DOUBLE TROUBLE	0.70
2500	17	DOUBLE TROUBLE	11.94
22.01	1	DOUBLE TROUBLE	143.94
2500	19	DOUBLE TROUBLE	0.00
		ISLAND BEACH	517.92
		ISLAND BEACH SOUTHERN	777.60
		SEDGE ISLAND	0.07
		SEDGE ISLAND	0.34
		SEDGE ISLAND	1.37
		BARNEGAT	1.73

Municipal, County and Non-Profit Owned Lands

BLOCK	LOT	APPROX. ACRES	NAME	OWNER	TYPE
1	18- 19, 12.01	88.40	MILLER AIR PARK	OCEAN CO	C
1	11- 12, 12.02, 13.02	100.00	PINELANDS	STATE (conveyed to county)	C
10.31	1	31.75	Hovnanian Sanctuary	NJ Audubon Society	NP

10.32	1	15.95	Hovnanian Sanctuary	NJ Audubon Society	NP
1014	1	26.14	GLEN CEDARS	BERKELEY TWP	M
1101	9	1.93	LIFETIME HOMES, INC.	OCEAN COUNTY	C
	1, 1.01, 1.02	121.68	SAVE BARNEGAT BAY	IZAAK WALTON LEAGUE Of OceanCo	NP
1108.02	15	0.38	GOOD LUCK POINT	OCEAN COUNTY	C
1108.03	1	2.88	GOOD LUCK POINT	OCEAN COUNTY	C
1108.05	1	0.33	GOOD LUCK POINT	OCEAN COUNTY	C
1201	1	0.28	OCEAN GATE	BERKELEY TWP	M
1202	1	1.12	OCEAN GATE	BERKELEY TWP	M
1206	1.01	50.58	PROJECT PRIORITY AREAS	AT&T COMPANY OF NJ	NP
1206	3- 5, 3.01, 7	228.86	GOOD LUCK POINT	OCEAN COUNTY	C
1207	2.02	161.06	PROJECT PRIORITY AREAS	AT&T COMPANY OF NJ	NP
1218	12	16.43	GOOD LUCK POINT	OCEAN COUNTY	C
1218	13	36.86	GOOD LUCK POINT	OCEAN COUNTY	C
1221.01	1	0.74	BERKELEY SHORES	BERKELEY TWP	M
1221.02	31.02	0.57	BERKELEY SHORES	BERKELEY TWP	M
1227	1	1.56	MOORAGE AVENUE	BERKELEY TWP	M
1244	1.02	39.91	GOOD LUCK POINT	OCEAN COUNTY	C
1248	1- 12	0.74	GOOD LUCK POINT	OCEAN COUNTY	C
1249	1- 20	1.17	GOOD LUCK POINT	OCEAN COUNTY	C
1250	1- 22	1.33	GOOD LUCK POINT	OCEAN COUNTY	C
1251	1- 22	1.37	GOOD LUCK POINT	OCEAN COUNTY	C
1252	3- 7, 11	0.27	GOOD LUCK POINT	OCEAN COUNTY	C
1253	5- 18	0.41	GOOD LUCK POINT	OCEAN COUNTY	C
1254	8- 46	2.35	GOOD LUCK POINT	OCEAN COUNTY	C
1255	1- 52	3.78	GOOD LUCK POINT	OCEAN COUNTY	C
1259	1- 44	2.50	GOOD LUCK POINT	OCEAN COUNTY	C
1262	1- 14	0.96	GOOD LUCK POINT	OCEAN COUNTY	C
1263	5- 6, 9- 18, 23- 44	2.13	GOOD LUCK POINT	OCEAN COUNTY	C
1264	1.04	37.05	GOOD LUCK POINT	OCEAN COUNTY	C
1265	5	9.67	GOOD LUCK POINT	OCEAN COUNTY	C
1267	1	28.48	GOOD LUCK POINT	OCEAN COUNTY	C
1268	2- 42	2.87	GOOD LUCK POINT	OCEAN COUNTY	C
1269	1- 31	1.99	GOOD LUCK POINT	OCEAN COUNTY	C
1270	2- 50	2.52	GOOD LUCK POINT	OCEAN COUNTY	C
1271	1- 10	0.63	GOOD LUCK POINT	OCEAN COUNTY	C
1271.01	11- 28	0.95	GOOD LUCK POINT	OCEAN COUNTY	C
1272	51- 61	0.62	GOOD LUCK POINT	OCEAN COUNTY	C
1272.01	38- 42	0.06	GOOD LUCK POINT	OCEAN COUNTY	C
1272.02	29- 36	0.37	GOOD LUCK POINT	OCEAN COUNTY	C
1297	1	47.01	BARNEGAT BAY WATERFRONT	TRUST FOR PUBLIC LAND	M
1298	1	1.08	BARNEGAT BAY WATERFRONT	TRUST FOR PUBLIC LAND	M
1299	1, 1.02, 1.01	5.46	BARNEGAT BAY WATERFRONT	TRUST FOR PUBLIC LAND	M
1300	1	19.14	BARNEGAT BAY WATERFRONT	TRUST FOR PUBLIC LAND	M

1401	46	55.20	BARNEGAT BAY WATERFRONT	TRUST FOR PUBLIC LAND	M
1401.01	46.01	1.34	BARNEGAT BAY WATERFRONT	TRUST FOR PUBLIC LAND	M
15	1- 3, 4.01, 5.01, 6, 7.01	273.06	MILLER AIR PARK	OCEAN CO	C
1546	26	1.26	BUTLER'S BEACH	BERKELEY TWP	M
1589	1	4.26	BEL AIRE PARK	BERKELEY TWP	M
1616.02	10	1.49	SANDPIPER BEACH	BERKELEY TWP	M
1626/ 1627	14-19/1- 16	6.39	Sandpiper/C	NJCF	NP
1660	1- 28	1.57	BERKELEY ISLAND WEST	OCEAN COUNTY	C
1664	1-19	1.11	BERKELEY ISLAND WEST	OCEAN COUNTY	C
1665	20- 24	0.38	BERKELEY ISLAND WEST	OCEAN COUNTY	C
1666	28	12.92	BERKELEY ISLAND WEST	OCEAN COUNTY	C
1689	1.01, 1.02, 1.03	6.82	ROBERTS AVENUE MARSH	OCEAN COUNTY	C
1689.03	22	1.04	UNLABELED	BERKELEY TWP	M
1689.03	23	0.07	ROBERTS AVENUE MARSH	OCEAN COUNTY	C
1720	4.02	1.49	WHITE SANDS BEACH	BERKELEY TWP	M
18.01	2.01	266.25	Hovnanian Sanctuary		NP
1900	13	1.14	Cedar Creek	NJCF TAX# 1513-05-1104	NP
1901	13.01	3.98	Cedar Creek	NJCF TAX# 1513-05-1104	NP
20	1	132.09	Hovnanian Sanctuary	NJ Audubon Society	NP
20.01	1	18.04	Hovnanian Sanctuary	NJ Audubon Society	NP
2302	1	47.25	BARNEGAT BAY WATERFRONT	TRUST FOR PUBLIC LAND	NP
336	1	5.64	ATHLETIC FIELD	BERKELEY TWP	M
356	3-4	249.22	TOWNSHIP RECREATION AREA	BERKELEY TWP	M
4	67	126.44	TPL TOM'S RIVER DIVIDE	OCEAN CO	C
52	541- 555	0.66	MANITOU PARK	BERKELEY TWP	M
777	44	64.70	CEDAR CREEK PARK	BERKELEY TWP	M
820	1	10.84	CEDAR CREEK PARK	BERKELEY TWP	M
909	1, 13, 15- 16	14.88	MILL CREEK	OCEAN COUNTY	C
939	5	24.33	CENTENNIAL	BERKELEY TWP	M
		0.05	UNLABELED	BERKELEY TWP	M
		3.94	BERKELEY ISLAND	OCEAN CO	C
		0.46	BERKELEY ISLAND	OCEAN CO	C
		9.50	BERKELEY ISLAND	OCEAN CO	C
		6.97	BERKELEY ISLAND	OCEAN CO	C

Type: M - Municipal; C - County; NP - Non Profit

Historic Resources

The NJ Historic Preservation Office administers a variety of programs that offer protection for historic properties. The HPO consults with federal agencies under Section 106 of the National Historic Preservation Act for federally funded, licensed or permitted projects. At the state level, the New Jersey Register of Historic Places Act requires that actions by state, county, or local governments, which may impact a property listed in the New Jersey Register of Historic Places, be reviewed and authorized through the HPO. The HPO also provides advice and comment for a number of permitting programs within the Department of Environmental Protection, including some permits required under the [Land Use Regulation Program](#).

The most effective way to protect historic resources and promote our architectural and archaeological heritage is through local stewardship. When implemented at the local level, historic preservation activities may take the form of master plan elements, comprehensive zoning ordinances, regulated code enforcement, or public education and outreach programs. Local initiatives have far reaching effects on preserving historic resources for future generations. The HPO provides technical assistance, training, and other resources for historic preservation to New Jersey's communities through a variety of programs.

The following New Jersey and National Registers of Historic Places listings include properties and historic districts in New Jersey for which a formal action was taken by the State Historic Preservation Officer or designee. The listings are current through the end of 2002, and the HPO will update these listings on a periodic basis to reflect ongoing additions and corrections.

The listings itemize the buildings, structures, sites, objects, and districts listed on the New Jersey Register of Historic Places (SR) and the National Register of Historic Places (NR). They also include resources that have received Certifications of Eligibility (COE), opinions of eligibility from the State Historic Preservation Officer (SHPO Opinion), or Determinations of Eligibility (DOE) from the Keeper of the National Register. These properties and historic districts all meet the New Jersey and National Register criteria for significance in American history, archaeology, architecture, engineering or culture, and possess integrity of location, design, setting, materials, workmanship, feeling and association. Properties that have been entered on the New Jersey and/or National Registers of Historic Places are listed by their historic names, which may be different from their current names. Properties that have SHPO Opinions or DOE's are listed by their historic name, when known.

New Jersey and National Registers of Historic Places

Site	ID #	Details
<u>BERKELEY TOWNSHIP</u>		
Coast Guard Station 112	3403	SHPO Opinion: 5/9/1996
Double Trouble State Park Historic District	2276(NR Reference #78001787)	NR:2/23/1978 SR: 10/14/1977
Garden State Parkway Historic District	3874	SHPO Opinion: 10/12/2001
Manitou Park School House	6(NR Reference #05000177)	NR:3/15/2005 SR: 12/6/2004 COE: 1/9/1995
Midway Camps Historic District	4090	SHPO Opinion:

		10/15/2001
U.S. Lifesaving Station Number 14	2322(NR Reference #78001789)	NR: 1/30/1978 SR: 3/7/1977

Attachments:

- Map- State and Local Open Space, Historical Sites, and National Wildlife Refuge

Regional Planning Areas

New Jersey and the State Plan have recognized several regional planning areas with a varying degree of regulatory and planning controls. These areas may be specifically identified by an act of the NJ Legislature (Highlands, Meadowlands, Pinelands, Coastal areas) or recognized by the State Plan as Special Resource Areas in order to establish a receptive environment for regional planning efforts (Sourland Mountains, Delaware Bayshore). Information on applicable regional planning areas is included below.

Coastal Area Facility Review Act (CAFRA)

As updated and amended in 1993, the Coastal Area Facility Review Act seeks to protect the coastal areas in New Jersey by regulating projects near coastal waters and environmentally sensitive lands in the southern part of the State. The CAFRA law regulates almost all development activities involved in residential, commercial, or industrial development, including construction, relocation, and enlargement of buildings or structures; and all related work, such as excavation, grading, shore protection structures, and site preparation. The Department of Environmental Protection carries out CAFRA through Coastal Zone Management Rules and the CAFRA planning map identifies the boundaries of CAFRA centers, cores, and nodes, Coastal Planning Areas and coastal centers. The CAFRA area begins where the Cheesapeake Creek enters Raritan Bay in Old Bridge, Middlesex County. It extends south along the coast around Cape May, and then north along the Delaware Bay ending at the Kilcohook National Wildlife Refuge in Salem County. The inland limit of the CAFRA area follows an irregular line drawn along public roads, railroad tracks, and other features.

New Jersey's coastline greatly contributes to New Jersey's economy, including tourism and recreational opportunities, and coastal areas provide crucial habitat for a wealth of wildlife, including migratory birds, commercially valuable fish and shellfish, and sporting and recreational species. Regulation is necessary to prevent pollution, destruction of vital wildlife habitat, increases in rainwater runoff, and destruction of the natural beauty that attracts visitors. Regulation of coastal activities is also necessary in some cases to prevent loss of life and property from coastal storms, erosion, and flooding. The CAFRA law was amended in 1993 to address these issues as well as require that the rules implementing the amendments be closely coordinated with the State Plan. In response to those statutory amendments, the Department in February 2000 adopted new rules for determining impervious cover limits and vegetative cover percentages for developments requiring a CAFRA permit based on the proposed development's location in a CAFRA center, CAFRA core, CAFRA node, Coastal Planning Area or coastal center.

The Department's CZM rules set forth general conditions under which the Department may accept, reject, or reject and revise boundaries of center and planning areas approved by the State Planning Commission as CAFRA centers and Coastal Planning Areas. Berkeley Township is partially within the CAFRA regulated area, and the Department will be reviewing your petition for Plan Endorsement and will require additional work and/or plans. Both municipal master plans and planning documents will be reviewed to ensure that they are consistent with the Department's rules and regulations as well as reach the Department's goal, to bring

environmental planning and resource management in coastal areas to a higher level. The Department's guidelines for areas within the CAFRA region are attached to this document.

Department of Environmental Protection
Office of Planning and Sustainable Communities
401 East State Street
P O Box 402
Trenton, NJ 08625-0402
609-341-5311
609-292-3268 (Fax)

Pinelands Commission

The Pinelands commission was created in 1979 in response to the National Parks and Recreation Act of 1978, which established the Pinelands National Reserve and authorized the creation of a planning entity responsible for preparing a comprehensive management plan for the Pinelands. The Pinelands Protection Act was passed by the NJ Legislature, and endorsed efforts to plan for the Pinelands, designated the Pinelands Commission as the regional planning entity call for by the federal legislation, and continued the interim restrictions on development. The Pinelands are an expanse of forest covering roughly one million acres, part or all of 53 municipalities, portions of seven counties, and nearly one-quarter of the State of New Jersey. The New Jersey Pinelands are located in the southeastern portion of the state in Cape May, Cumberland, Atlantic, Gloucester, Burlington, Camden, and Ocean Counties.

The Pinelands area harbors many endangered plant and animal species in combinations found nowhere else in the world. The Pinelands ecosystem had retained its ability to maintain itself in the face of human activities until the last few decades. Throughout this time, development pressures grew in the Pinelands and threatened the continued viability of the ecosystem. Recognizing that the Pinelands area functions as a total ecosystem, state and federal agency studies led to many government actions that recognized the need for a regional approach to land-use in the area. The Pinelands Commission verifies local approvals and may nullify or overturn local approvals that do not conform to the standards of the Pinelands Comprehensive Management Plan.

Berkeley Township is partially in the Pinelands Area regulated by the Pinelands Commission, but is entirely within the Pinelands National Reserve, and the Department will consult with the Pinelands Commission regarding the petition for Plan Endorsement. Berkeley Township's Master Plan and zoning ordinances must conform to the Comprehensive Management Plan and be certified by the Pinelands Commission in order to receive Plan Endorsement.

Pinelands Commission

PO Box 7
15 Springfield Road
New Lisbon, New Jersey 08064
Phone: (609) 894-7300 Fax: (609) 894-7330

The Barnegat Bay National Estuary Program (BBNEP)

The BBNEP is one of 28 Congressionally designated National Estuary Programs throughout the United States working to improve the health of nationally significant estuaries. The program is sponsored by the [United States Environmental Protection Agency](#), the [Ocean County Board of Chosen Freeholders](#), and [Ocean County College](#).

The Barnegat Bay National Estuary Program (BBNEP) began in March 1995, when Governor Christine Todd Whitman submitted an application to the US EPA to have the Barnegat Bay/Berkeley Township estuarine system included in the National Estuary Program (NEP), that is, to be recognized as an “estuary of national significance.”

In July 1995, US EPA Administrator Carol Browner officially named the Barnegat Bay/Berkeley Township estuarine system a National Estuary Program. In April 1996, the US EPA and New Jersey Department of Environmental Protection (NJ DEP) signed a joint conference agreement and officially convened the Barnegat Bay National Estuary Program Management Conference. During the next eight years of the Program, the Management Conference was engaged in numerous activities to accomplish the development of the [Comprehensive Conservation and Management Plan \(CCMP\)](#) to meet the goals of Section 320 of the CWA. The CCMP was approved on May 15, 2002.

Under the CCMP, the Barnegat Bay National Estuary Program was charged with developing a coalition of government, private, and commercial interests for the preservation of the Barnegat Bay and Berkeley Township estuaries by:

- identifying problems
- assessing trends
- designing pollution control
- developing resource management strategies
- recommending corrective actions
- seeking implementation commitments

The Barnegat Bay National Estuary Program (BBNEP) utilizes an ecosystem-based management approach to protecting and preserving the natural resources of the Barnegat Bay estuary. Ecosystem-based management relies on the following key principles: 1) partnerships and citizen participation; 2) a science-based approach, which means using the best available scientific knowledge (social, economic, and ecological) as a foundation for decision-making; 3) understanding natural resource interrelationships; and 4) focus on sustainability of whole ecological systems. The approach takes a long-term view and a comprehensive perspective, which means finding solutions that support economic prosperity, lasting livelihoods, and ecological health. The program is focusing on the following issues to effect change and understanding of this complex system.

Water quality in the Barnegat Bay watershed is being degraded by nonpoint and point sources of pollution. Excessive nutrient inputs, coupled with bacterial pollution, upset the natural balance of the Barnegat Bay ecosystem and can directly impair human uses of the bay, including restriction on shellfish harvesting and swimming. A significant amount of this pollution is attributed to development on land and the activities associated with development (e.g., paved surfaces, vehicle use, lawn and garden maintenance, and septic systems) although other sources, such as boats and wildlife populations, also contribute to the problem.

The continued health and biodiversity of marine and estuarine systems depends on the maintenance of high-quality habitat. Threats to habitat in the Barnegat Bay watershed include conversion of open land and forest to residential and commercial development, highway construction, marinas, dredging and filling, and bulkheading. Declines in fish and wildlife populations have resulted from fragmentation and loss of habitats and ecosystems; pollution and decreased water quality due to increases in the runoff of sediments, nutrients, and chemicals; and overexploitation of resources.

Given Ocean County's increasing population and popularity as a resort area, the BBNEP recognizes the need to put constraints on the use of Barnegat Bay and its watershed. Effective management of the natural resources of the Barnegat Bay estuary requires careful consideration of the balance between appropriate and necessary uses on the one hand, and protection of natural resources on the other. The two primary areas of competing uses in the Barnegat Bay and its watershed are land use and development activities that threaten environmental quality and contention over the use of boats and personal watercraft.

The BBNEP covers all of Berkeley Township, and the Department will be evaluating the Township's plans for consistency with the Bay Program as well as the Township's mechanisms in place to minimize the impacts of development on the Estuary.

Barnegat Bay National Estuary Program

Ocean County College

College Drive

PO Box 2001

Toms River, NJ 08754

Phone: (732) 255-0472 Fax: (732) 255-0473

Attachments:

- Map—CAFRA, Pinelands and BBNEP Areas Map

Summary of Major Issues: Berkeley Township

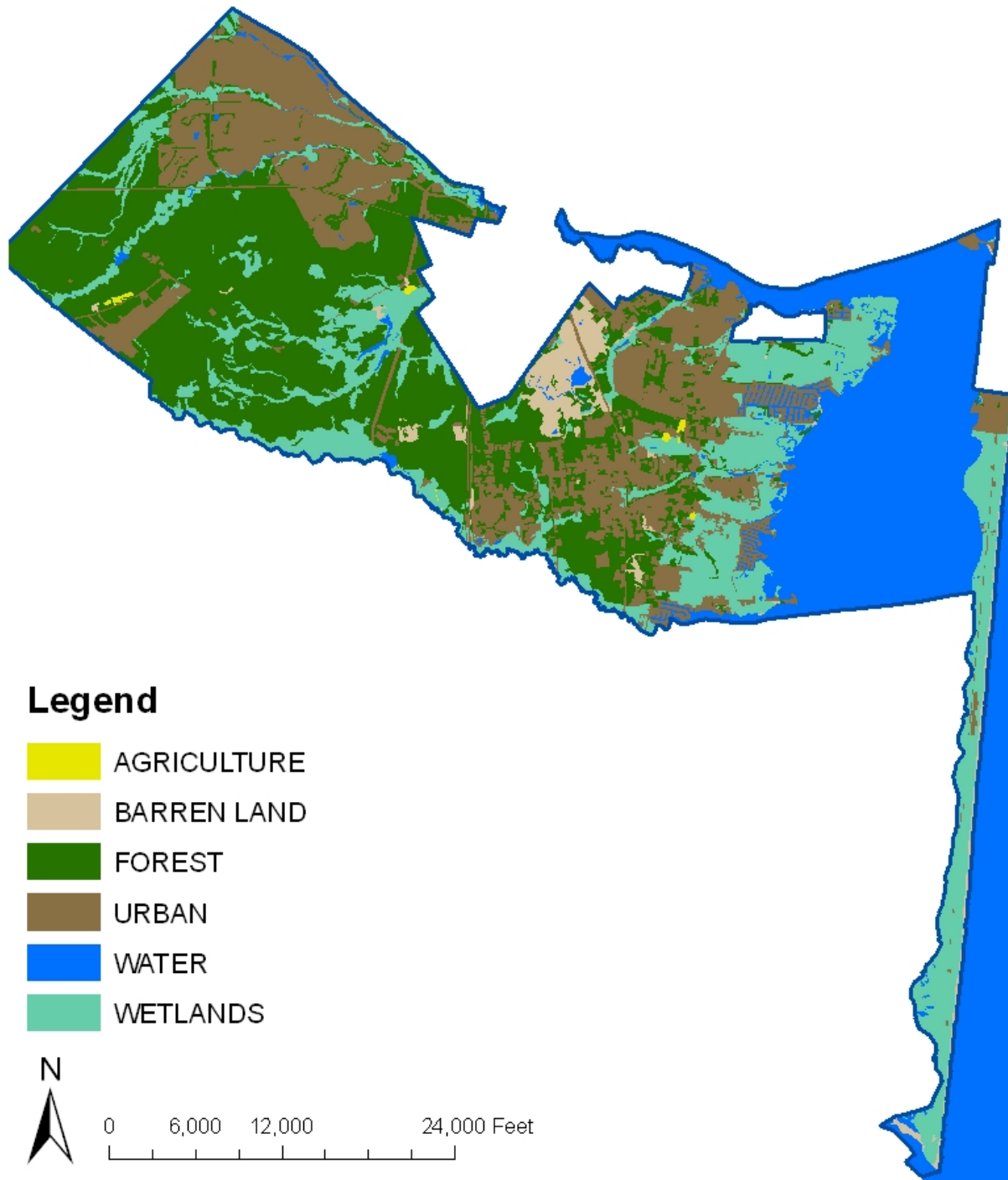
1. The Township's wastewater service agreements should be consistent with the Township's vision, petition and planning documents, and land-use regulations. Lands deemed unsuitable for development at a density, intensity, or scale which would require sewers must be removed from sewer service areas as part of any new Wastewater Management Plan. Additionally, the Township will need to show consistency with the groundwater quality protection standard of 2 mg/L (or parts per million, or ppm) nitrate level requirement as prescribed by N.J.A.C. 7:9C for areas outside of the sewer service area.
2. The Township should take into account this OCA report and the development of their Wastewater Management Plan and Water Supply Plans during the visioning process, in particular when the Township is identifying sites for affordable housing. It is important that the township address its affordable housing need within the Coastal Suburban Planning Area or any designated Town Centers and/or nodes where infrastructure is currently available or planned and development is appropriate.
3. The Township will need to work with the Department to develop a Stream Corridor Protection Plan and adopt a Stream Corridor Protection ordinance that is consistent with the Flood Hazard Rules and Surface Water Quality Rules.
4. The Township will need to demonstrate consistency with the Pinelands, CAFRA and/or Barnegat Bay National Estuary Program zone for areas located in these regions. The Department notes that the Township's Master Plan covering the Pinelands Protection Area has been certified by the Pinelands Commission, and consistency should be continued throughout the endorsement process.
5. The Department recommends that Berkeley Township adopt a Well Head Protection Ordinance for areas within Well Head Protection Areas.
6. The Township is rich with threatened and endangered species habitat and the Township should identify measures currently in place and identify additional steps that it could take to further protect these habitats. The Department supports and is willing to assist the Township in developing zoning overlays for critical areas, mandatory clustering, protection for stream corridors and steep slopes, and requirements for environmental impact statements for new development.
7. Sustainability Statement- The Township needs to expand this further to include water conservation, habitat restoration/ protection, green buildings, recycling, and public outreach and consider the addition of other "Green" initiatives.
8. The Primary Center is also a Redevelopment Area and one of two proposed TDR receiving area. Items of concern that may come up during the consistency review regarding this town center are: provision of adequate affordable housing opportunities, hazardous site clean –up issues, parking, infill, treatment of stormwater, environmentally sensitive areas, consistency with the coastal zone management rules, especially traffic, secondary impacts and habitat protection concerns.
9. The Secondary Town Center will also need to address the items above as well as show how transferred development rights will be used and that there is capacity (land, water,

wastewater, etc) to support increased density and population as a result of the TDR program.

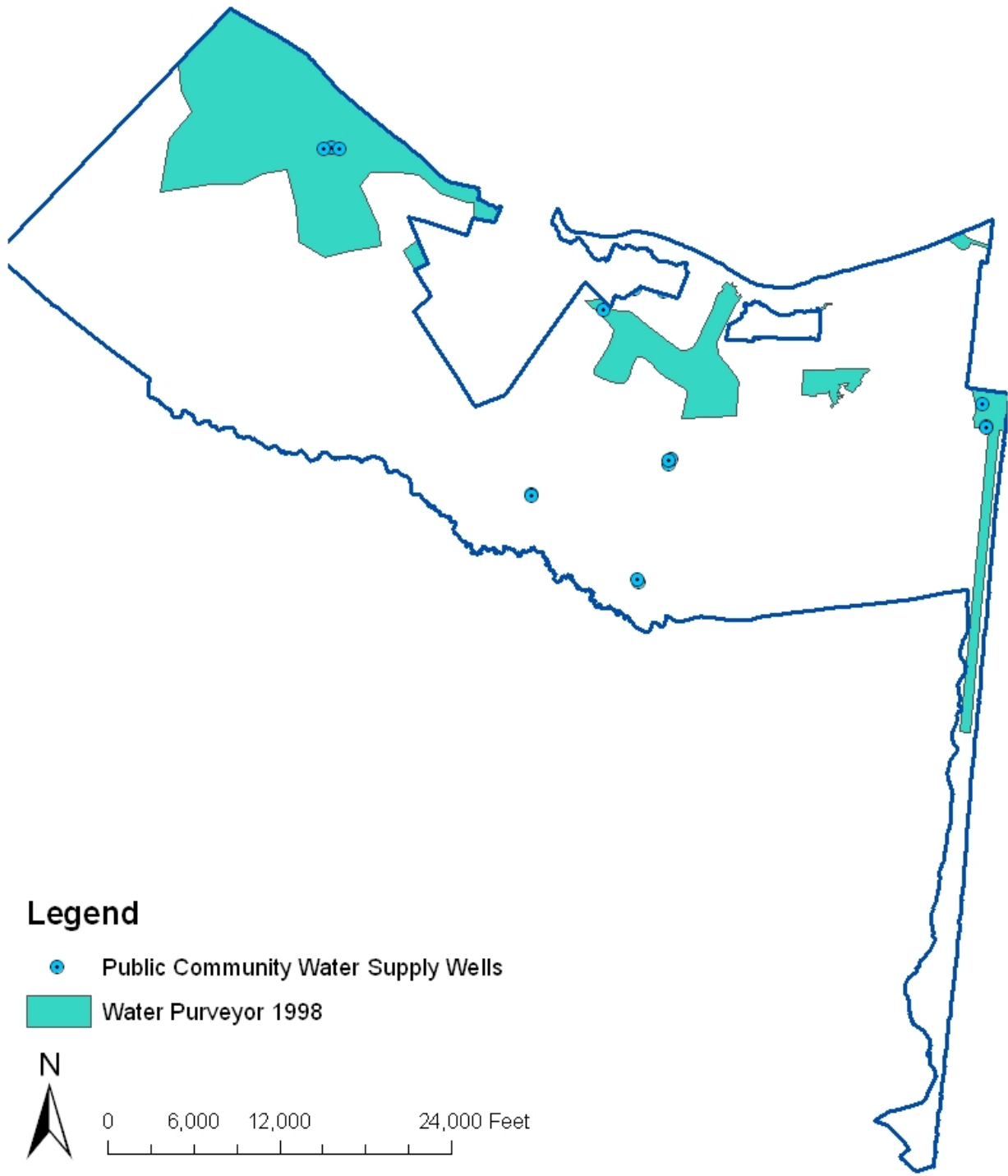
10. During the consistency review the Department will be reviewing current and planned development to determine consistency with Department policies as well as the CZM rules. One issue to consider will be whether Nodes are appropriate designation within for Berkeley Township.
11. The Township will need to actively work with Ocean County and the Department to determine appropriate receiving area densities, size, and location, especially to ensure capacity (wastewater, water, zoning, etc) exists or is planned to receive 800 residential units. If transferred development rights are to be used for non-residential development, more detailed information is needed to assess the benefits and impacts of the proposal.
12. Affordable housing should be provided within the receiving areas/ Town Centers within Berkeley Township. The Township will need to evaluate the build-out scenarios for all nodes and centers and provide for affordable housing within these designated areas.
13. The Township has identified a zoning issue on page 32 of their report with regards to development in Manchester Township. As a part of the Plan Endorsement process, the Township should work with Manchester Township to resolve the issue.
14. Instead of buffering between Berkeley's residential zone and Lacey's marine commercial zone, could the Townships consider mix-use overlays and pedestrian connections? (MSA page 32)
15. The expansion of sewers into septic areas should be consistent with the Department's recently adopted Water Quality Management Planning Rules.
16. As part of the endorsement process Berkeley Township with help from the Department should develop a plan for the remediation of the KCS sites envisioned by the Eastern Mainland 2020 Vision Statement to be returned to a productive use.
17. Does the mix-use subdistrict proposed on Page 39 have a car or pedestrian orientation as this an important component of reaching health and GHG reductions goals?
18. The Township will need to supply the Department with the most up-to-date mapping of sending and receiving zones.
19. Are there any Redevelopment Plans, conceptual or actual, that articulate the Township's vision?

Maps and Additional Information

Land Use/ Land Cover 2002



Public Community Water Supply Wells and Water Purveyor Areas



Public Water System Deficit/Surplus

SHORE WATER COMPANY

PWSID: 1505003
County: Ocean

Last Updated: 11/14/05

► [Glossary of Terms Listed Below](#)

Water Supply Firm Capacity: 0.634 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	13.500 MGM	N/A MGM	13.500 MGM
Yearly Limit	95.000 MGY	N/A MGY	95.000 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	0.394 MGD	07/2002	N/A MGD	N/A MGD
Monthly Demand	12.216 MGM	07/2002	N/A MGM	N/A MGM
Yearly Demand	69.660 MGY	2001	N/A MGY	N/A MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
N/A MGD	N/A MGM
	N/A MGY

Note: Negative values (a deficit) indicate a shortfall in firm capacity and/or diversion privileges or available supplies through bulk purchase agreements.

Bureau of Water System and Well Permitting Comments:

no comments provided

Bureau of Water Allocation Comments:

no comments provided

For more information concerning water supply deficit and surplus, please refer to:

► [Firm Capacity and Water Allocation Analysis](#) (Pdf Format)

► [Currently Effective Water Allocation Permits by County](#)

This report displays all effective water allocation permits issued by the department.

► [Pending Water Allocation Permits with Requests for a Hearing](#)

All pending water allocation permits with public hearing requests.

► [Water Allocation Permits Made Effective within a Selected Timeframe](#)

This report displays water allocation permits based on a specified date range.

Questions regarding safe demands and firm capacity please contact the Bureau of Water System and Well Permitting at 609-984-6831 or for questions concerning water allocation and status please contact the Bureau of Water Allocation at 609-292-2957.

Questions may also be sent to the [Division of Water Supply](#)

[back to search results](#)

Glossary of Terms

Allocation Limit: The maximum allowed by a valid Water Allocation Permit issued by the Bureau of Water Allocation. This may be surface or ground water, and may be expressed in MGD, MGM, MGY or some combination thereof. Withdrawals may also be limited by other factors and have seasonal or

other restrictions such as passing flow requirements.

Committed Peak Demand: The demand associated with projects that have been approved for ultimate connection to the system, but are not yet constructed as indicated through the submission of construction certifications or certificates of occupancy. This is calculated by totaling the demand as included in Water Main Extension (WME) permits and the demand associated with projects not requiring a WME permit. For various review purposes this quantity may be represented as MGD, MGM and/or MGY.

Contract Limit: Purchased water, where regulated by an approved service contract, may be included in the overall allocation quantity where appropriate. Contracts may exist with minimum, maximum, seasonal or other restrictions. In some instances, the value is an estimate, not an exact limit.

Current Peak Demand: This is the average day of the highest recorded demand month occurring within the last five (5) years. (For the purpose of this table, the calculation for current peak demand was based on 31 days. Systems will be reviewed on an individual basis.) This includes water from a system's own sources and all other sources of water (i.e. purchased water).

Firm Capacity: Adequate pumping equipment and/or treatment capacity (excluding coagulation, flocculation and sedimentation) to meet peak daily demand, when the largest pumping unit or treatment unit is out of service. The value is represented in MGD.

Firm Capacity Deficit or Surplus = (Firm Capacity - Total Peak Daily Demand): The difference between the Firm Capacity and the sum of the peak daily demand and committed daily demand. This is a measure of the physical ability to provide treated water at adequate pressure when the largest pumping unit or treatment unit is out of service. Negative values indicate a shortfall in Firm Capacity.

Requested Allocation: The amount of water the public water system is requesting as part of its water allocation permit application, including existing allocations. This value is represented in MGM and MGY.

Total Peak Water Demand: The sum of the public water system's current peak demand and committed peak demand. The value is represented in MGD, MGM, and MGY.

Total Available Water Supply: The sum of the Allocation Limit and Contract Limit. This value is represented in MGM and MGY.

Water Supply Deficit or Surplus = (Total Water Allocation Permit Limit- Total Peak Demand): The monthly and/or annual limitations of an Allocation Permit minus the sum of the monthly and/or annual demands recorded based on the water use records plus the monthly and/or annual demand projected for approved but not yet constructed projects. Negative values indicate a shortfall in diversion privileges or available supplies through bulk purchase agreements.

BERKELEY WATER COMPANY

PWSID: 1505002
County: Ocean

Last Updated: 04/17/06

► [Glossary of Terms Listed Below](#)

Water Supply Firm Capacity: 1.620 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	48.000 MGM	N/A MGM	48.000 MGM
Yearly Limit	355.000 MGY	N/A MGY	355.000 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	1.213 MGD	N/A	0.030 MGD	1.243 MGD
Monthly Demand	37.615 MGM	N/A	0.465 MGM	38.080 MGM
Yearly Demand	318.370 MGY	N/A	3.650 MGY	322.020 MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
0.377 MGD	9.920 MGM
	32.980 MGY

Note: Negative values (a deficit) indicate a shortfall in firm capacity and/or diversion privileges or available supplies through bulk purchase agreements.

Bureau of Water System and Well Permitting Comments:

no comments provided

Bureau of Water Allocation Comments:

no comments provided

For more information concerning water supply deficit and surplus, please refer to:

► [Firm Capacity and Water Allocation Analysis](#) (Pdf Format)

► [Currently Effective Water Allocation Permits by County](#)

This report displays all effective water allocation permits issued by the department.

► [Pending Water Allocation Permits with Requests for a Hearing](#)

All pending water allocation permits with public hearing requests.

► [Water Allocation Permits Made Effective within a Selected Timeframe](#)

This report displays water allocation permits based on a specified date range.

Questions regarding safe demands and firm capacity please contact the Bureau of Water System and Well Permitting at 609-984-6831 or for questions concerning water allocation and status please contact the Bureau of Water Allocation at 609-292-2957.

Questions may also be sent to the [Division of Water Supply](#)

[back to search results](#)

Glossary of Terms

Allocation Limit: The maximum allowed by a valid Water Allocation Permit issued by the Bureau of Water Allocation. This may be surface or ground water, and may be expressed in MGD, MGM, MGY or some combination thereof. Withdrawals may also be limited by other factors and have seasonal or other restrictions such as passing flow requirements.

Committed Peak Demand: The demand associated with projects that have been approved for ultimate connection to the system, but are not yet constructed as indicated through the submission of construction certifications or certificates of occupancy. This is calculated by totaling the demand as included in Water Main Extension (WME) permits and the demand associated with projects not requiring a WME permit. For various review purposes this quantity may be represented as MGD, MGM and/or MGY.

Contract Limit: Purchased water, where regulated by an approved service contract, may be included in the overall allocation quantity where appropriate. Contracts may exist with minimum, maximum, seasonal or other restrictions. In some instances, the value is an estimate, not an exact limit.

Current Peak Demand: This is the average day of the highest recorded demand month occurring within the last five (5) years. (For the purpose of this table, the calculation for current peak demand was based on 31 days. Systems will be reviewed on an individual basis.) This includes water from a system's own sources and all other sources of water (i.e. purchased water).

Firm Capacity: Adequate pumping equipment and/or treatment capacity (excluding coagulation, flocculation and sedimentation) to meet peak daily demand, when the largest pumping unit or treatment unit is out of service. The value is represented in MGD.

Firm Capacity Deficit or Surplus = (Firm Capacity - Total Peak Daily Demand): The difference between the Firm Capacity and the sum of the peak daily demand and committed daily demand. This is a measure of the physical ability to provide treated water at adequate pressure when the largest pumping unit or treatment unit is out of service. Negative values indicate a shortfall in Firm Capacity.

Requested Allocation: The amount of water the public water system is requesting as part of its water allocation permit application, including existing allocations. This value is represented in MGM and MGY.

Total Peak Water Demand: The sum of the public water system's current peak demand and committed peak demand. The value is represented in MGD, MGM, and MGY.

Total Available Water Supply: The sum of the Allocation Limit and Contract Limit. This value is represented in MGM and MGY.

Water Supply Deficit or Surplus = (Total Water Allocation Permit Limit- Total Peak Demand): The monthly and/or annual limitations of an Allocation Permit minus the sum of the monthly and/or annual demands recorded based on the water use records plus the monthly and/or annual demand projected for approved but not yet constructed projects. Negative values indicate a shortfall in diversion privileges or available supplies through bulk purchase agreements.

UNITED WATER TOMS RIVER

PWSID: 1507005
County: Ocean

Last Updated: 12/05/06

► [Glossary of Terms Listed Below](#)

Water Supply Firm Capacity: 26.532 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	734.288 MGM	0.000 MGM	734.288 MGM
Yearly Limit	5589.520 MGY	0.000 MGY	5589.520 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	20.229 MGD	07/2002	0.616 MGD	20.845 MGD
Monthly Demand	627.109 MGM	07/2002	9.548 MGM	636.657 MGM
Yearly Demand	4662.554 MGY	2005	74.947 MGY	4737.501 MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
5.687 MGD	97.631 MGM
	852.019 MGY

Note: Negative values (a deficit) indicate a shortfall in firm capacity and/or diversion privileges or available supplies through bulk purchase agreements.

Bureau of Water System and Well Permitting Comments:

A credit is given for the unapproved contract to bulk purchase water from PI = NJ1518005 at max rate of 1.25 MGD and for ASR well 46 at a rate of 1.44 MGD.

Bureau of Water Allocation Comments:

5000 & 5001. Total allocation here is lower than in the Water Allocation permits because 5001 permits non-public supply use of 800 gpm

For more information concerning water supply deficit and surplus, please refer to:

► [Firm Capacity and Water Allocation Analysis](#) (Pdf Format)

► [Currently Effective Water Allocation Permits by County](#)

This report displays all effective water allocation permits issued by the department.

► [Pending Water Allocation Permits with Requests for a Hearing](#)

All pending water allocation permits with public hearing requests.

► [Water Allocation Permits Made Effective within a Selected Timeframe](#)

This report displays water allocation permits based on a specified date range.

Questions regarding safe demands and firm capacity please contact the Bureau of Water System and Well Permitting at 609-984-6831 or for questions concerning water allocation and status please contact the Bureau of Water Allocation at 609-292-2957.

Questions may also be sent to the [Division of Water Supply](#)

[back to search results](#)

Glossary of Terms

Allocation Limit: The maximum allowed by a valid Water Allocation Permit issued by the Bureau of Water Allocation. This may be surface or ground water, and may be expressed in MGD, MGM, MGY or

some combination thereof. Withdrawals may also be limited by other factors and have seasonal or other restrictions such as passing flow requirements.

Committed Peak Demand: The demand associated with projects that have been approved for ultimate connection to the system, but are not yet constructed as indicated through the submission of construction certifications or certificates of occupancy. This is calculated by totaling the demand as included in Water Main Extension (WME) permits and the demand associated with projects not requiring a WME permit. For various review purposes this quantity may be represented as MGD, MGM and/or MGY.

Contract Limit: Purchased water, where regulated by an approved service contract, may be included in the overall allocation quantity where appropriate. Contracts may exist with minimum, maximum, seasonal or other restrictions. In some instances, the value is an estimate, not an exact limit.

Current Peak Demand: This is the average day of the highest recorded demand month occurring within the last five (5) years. (For the purpose of this table, the calculation for current peak demand was based on 31 days. Systems will be reviewed on an individual basis.) This includes water from a system's own sources and all other sources of water (i.e. purchased water).

Firm Capacity: Adequate pumping equipment and/or treatment capacity (excluding coagulation, flocculation and sedimentation) to meet peak daily demand, when the largest pumping unit or treatment unit is out of service. The value is represented in MGD.

Firm Capacity Deficit or Surplus = (Firm Capacity - Total Peak Daily Demand): The difference between the Firm Capacity and the sum of the peak daily demand and committed daily demand. This is a measure of the physical ability to provide treated water at adequate pressure when the largest pumping unit or treatment unit is out of service. Negative values indicate a shortfall in Firm Capacity.

Requested Allocation: The amount of water the public water system is requesting as part of its water allocation permit application, including existing allocations. This value is represented in MGM and MGY.

Total Peak Water Demand: The sum of the public water system's current peak demand and committed peak demand. The value is represented in MGD, MGM, and MGY.

Total Available Water Supply: The sum of the Allocation Limit and Contract Limit. This value is represented in MGM and MGY.

Water Supply Deficit or Surplus = (Total Water Allocation Permit Limit- Total Peak Demand): The monthly and/or annual limitations of an Allocation Permit minus the sum of the monthly and/or annual demands recorded based on the water use records plus the monthly and/or annual demand projected for approved but not yet constructed projects. Negative values indicate a shortfall in diversion privileges or available supplies through bulk purchase agreements.

SEASIDE HEIGHTS WATER DEPARTMENT

PWSID: 1526001
County: Ocean

Last Updated: 12/12/06

► [Glossary of Terms Listed Below](#)

Water Supply Firm Capacity: 3.168 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	72.000 MGM	N/A MGM	72.000 MGM
Yearly Limit	475.000 MGY	N/A MGY	475.000 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	2.074 MGD	N/A	0.000 MGD	2.074 MGD
Monthly Demand	64.290 MGM	N/A	0.000 MGM	64.290 MGM
Yearly Demand	403.371 MGY	N/A	0.000 MGY	403.371 MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
1.094 MGD	7.710 MGM
	71.629 MGY

Note: Negative values (a deficit) indicate a shortfall in firm capacity and/or diversion privileges or available supplies through bulk purchase agreements.

Bureau of Water System and Well Permitting Comments:

no comments provided

Bureau of Water Allocation Comments:

no comments provided

For more information concerning water supply deficit and surplus, please refer to:

► [Firm Capacity and Water Allocation Analysis](#) (Pdf Format)

► [Currently Effective Water Allocation Permits by County](#)

This report displays all effective water allocation permits issued by the department.

► [Pending Water Allocation Permits with Requests for a Hearing](#)

All pending water allocation permits with public hearing requests.

► [Water Allocation Permits Made Effective within a Selected Timeframe](#)

This report displays water allocation permits based on a specified date range.

Questions regarding safe demands and firm capacity please contact the Bureau of Water System and Well Permitting at 609-984-6831 or for questions concerning water allocation and status please contact the Bureau of Water Allocation at 609-292-2957.

Questions may also be sent to the [Division of Water Supply](#)

[back to search results](#)

Glossary of Terms

Allocation Limit: The maximum allowed by a valid Water Allocation Permit issued by the Bureau of Water Allocation. This may be surface or ground water, and may be expressed in MGD, MGM, MGY or some combination thereof. Withdrawals may also be limited by other factors and have seasonal or other restrictions such as passing flow requirements.

Committed Peak Demand: The demand associated with projects that have been approved for ultimate connection to the system, but are not yet constructed as indicated through the submission of construction certifications or certificates of occupancy. This is calculated by totaling the demand as included in Water Main Extension (WME) permits and the demand associated with projects not requiring a WME permit. For various review purposes this quantity may be represented as MGD, MGM and/or MGY.

Contract Limit: Purchased water, where regulated by an approved service contract, may be included in the overall allocation quantity where appropriate. Contracts may exist with minimum, maximum, seasonal or other restrictions. In some instances, the value is an estimate, not an exact limit.

Current Peak Demand: This is the average day of the highest recorded demand month occurring within the last five (5) years. (For the purpose of this table, the calculation for current peak demand was based on 31 days. Systems will be reviewed on an individual basis.) This includes water from a system's own sources and all other sources of water (i.e. purchased water).

Firm Capacity: Adequate pumping equipment and/or treatment capacity (excluding coagulation, flocculation and sedimentation) to meet peak daily demand, when the largest pumping unit or treatment unit is out of service. The value is represented in MGD.

Firm Capacity Deficit or Surplus = (Firm Capacity - Total Peak Daily Demand): The difference between the Firm Capacity and the sum of the peak daily demand and committed daily demand. This is a measure of the physical ability to provide treated water at adequate pressure when the largest pumping unit or treatment unit is out of service. Negative values indicate a shortfall in Firm Capacity.

Requested Allocation: The amount of water the public water system is requesting as part of its water allocation permit application, including existing allocations. This value is represented in MGM and MGY.

Total Peak Water Demand: The sum of the public water system's current peak demand and committed peak demand. The value is represented in MGD, MGM, and MGY.

Total Available Water Supply: The sum of the Allocation Limit and Contract Limit. This value is represented in MGM and MGY.

Water Supply Deficit or Surplus = (Total Water Allocation Permit Limit- Total Peak Demand): The monthly and/or annual limitations of an Allocation Permit minus the sum of the monthly and/or annual demands recorded based on the water use records plus the monthly and/or annual demand projected for approved but not yet constructed projects. Negative values indicate a shortfall in diversion privileges or available supplies through bulk purchase agreements.

BERKELEY TOWNSHIP MUA

PWSID: 1505004
County: Ocean

Last Updated: 11/02/06

► [Glossary of Terms Listed Below](#)

Water Supply Firm Capacity: 1.512 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	65.000 MGM	N/A MGM	65.000 MGM
Yearly Limit	722.000 MGY	N/A MGY	722.000 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	0.884 MGD	08/2006	0.019 MGD	0.903 MGD
Monthly Demand	27.400 MGM	08/2006	0.295 MGM	27.695 MGM
Yearly Demand	216.100 MGY	2005	2.312 MGY	218.412 MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
0.609 MGD	37.305 MGM
	503.588 MGY

Note: Negative values (a deficit) indicate a shortfall in firm capacity and/or diversion privileges or available supplies through bulk purchase agreements.

Bureau of Water System and Well Permitting Comments:

Updated with permit # WCP005384

Bureau of Water Allocation Comments:

no comments provided

For more information concerning water supply deficit and surplus, please refer to:

► [Firm Capacity and Water Allocation Analysis](#) (Pdf Format)

► [Currently Effective Water Allocation Permits by County](#)

This report displays all effective water allocation permits issued by the department.

► [Pending Water Allocation Permits with Requests for a Hearing](#)

All pending water allocation permits with public hearing requests.

► [Water Allocation Permits Made Effective within a Selected Timeframe](#)

This report displays water allocation permits based on a specified date range.

Questions regarding safe demands and firm capacity please contact the Bureau of Water System and Well Permitting at 609-984-6831 or for questions concerning water allocation and status please contact the Bureau of Water Allocation at 609-292-2957.

Questions may also be sent to the [Division of Water Supply](#)

[back to search results](#)

Glossary of Terms

Allocation Limit: The maximum allowed by a valid Water Allocation Permit issued by the Bureau of Water Allocation. This may be surface or ground water, and may be expressed in MGD, MGM, MGY or some combination thereof. Withdrawals may also be limited by other factors and have seasonal or other restrictions such as passing flow requirements.

Committed Peak Demand: The demand associated with projects that have been approved for ultimate connection to the system, but are not yet constructed as indicated through the submission of construction certifications or certificates of occupancy. This is calculated by totaling the demand as included in Water Main Extension (WME) permits and the demand associated with projects not requiring a WME permit. For various review purposes this quantity may be represented as MGD, MGM and/or MGY.

Contract Limit: Purchased water, where regulated by an approved service contract, may be included in the overall allocation quantity where appropriate. Contracts may exist with minimum, maximum, seasonal or other restrictions. In some instances, the value is an estimate, not an exact limit.

Current Peak Demand: This is the average day of the highest recorded demand month occurring within the last five (5) years. (For the purpose of this table, the calculation for current peak demand was based on 31 days. Systems will be reviewed on an individual basis.) This includes water from a system's own sources and all other sources of water (i.e. purchased water).

Firm Capacity: Adequate pumping equipment and/or treatment capacity (excluding coagulation, flocculation and sedimentation) to meet peak daily demand, when the largest pumping unit or treatment unit is out of service. The value is represented in MGD.

Firm Capacity Deficit or Surplus = (Firm Capacity - Total Peak Daily Demand): The difference between the Firm Capacity and the sum of the peak daily demand and committed daily demand. This is a measure of the physical ability to provide treated water at adequate pressure when the largest pumping unit or treatment unit is out of service. Negative values indicate a shortfall in Firm Capacity.

Requested Allocation: The amount of water the public water system is requesting as part of its water allocation permit application, including existing allocations. This value is represented in MGM and MGY.

Total Peak Water Demand: The sum of the public water system's current peak demand and committed peak demand. The value is represented in MGD, MGM, and MGY.

Total Available Water Supply: The sum of the Allocation Limit and Contract Limit. This value is represented in MGM and MGY.

Water Supply Deficit or Surplus = (Total Water Allocation Permit Limit- Total Peak Demand): The monthly and/or annual limitations of an Allocation Permit minus the sum of the monthly and/or annual demands recorded based on the water use records plus the monthly and/or annual demand projected for approved but not yet constructed projects. Negative values indicate a shortfall in diversion privileges or available supplies through bulk purchase agreements.

OCEAN GATE WATER DEPARTMENT

PWSID: 1521001
County: Ocean

Last Updated: 05/01/06

► [Glossary of Terms Listed Below](#)

Water Supply Firm Capacity: 0.230 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	12.000 MGM	N/A MGM	12.000 MGM
Yearly Limit	100.000 MGY	N/A MGY	100.000 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	0.370 MGD	N/A	0.000 MGD	0.370 MGD
Monthly Demand	10.509 MGM	07/2002	0.000 MGM	10.509 MGM
Yearly Demand	87.781 MGY	2003	0.000 MGY	87.781 MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
-0.140 MGD	1.491 MGM
	12.219 MGY

Note: Negative values (a deficit) indicate a shortfall in firm capacity and/or diversion privileges or available supplies through bulk purchase agreements.

Bureau of Water System and Well Permitting Comments:

no comments provided

Bureau of Water Allocation Comments:

no comments provided

For more information concerning water supply deficit and surplus, please refer to:

► [Firm Capacity and Water Allocation Analysis](#) (Pdf Format)

► [Currently Effective Water Allocation Permits by County](#)

This report displays all effective water allocation permits issued by the department.

► [Pending Water Allocation Permits with Requests for a Hearing](#)

All pending water allocation permits with public hearing requests.

► [Water Allocation Permits Made Effective within a Selected Timeframe](#)

This report displays water allocation permits based on a specified date range.

Questions regarding safe demands and firm capacity please contact the Bureau of Water System and Well Permitting at 609-984-6831 or for questions concerning water allocation and status please contact the Bureau of Water Allocation at 609-292-2957.

Questions may also be sent to the [Division of Water Supply](#)

[back to search results](#)

Glossary of Terms

Allocation Limit: The maximum allowed by a valid Water Allocation Permit issued by the Bureau of Water Allocation. This may be surface or ground water, and may be expressed in MGD, MGM, MGY or some combination thereof. Withdrawals may also be limited by other factors and have seasonal or other restrictions such as passing flow requirements.

Committed Peak Demand: The demand associated with projects that have been approved for ultimate connection to the system, but are not yet constructed as indicated through the submission of construction certifications or certificates of occupancy. This is calculated by totaling the demand as included in Water Main Extension (WME) permits and the demand associated with projects not requiring a WME permit. For various review purposes this quantity may be represented as MGD, MGM and/or MGY.

Contract Limit: Purchased water, where regulated by an approved service contract, may be included in the overall allocation quantity where appropriate. Contracts may exist with minimum, maximum, seasonal or other restrictions. In some instances, the value is an estimate, not an exact limit.

Current Peak Demand: This is the average day of the highest recorded demand month occurring within the last five (5) years. (For the purpose of this table, the calculation for current peak demand was based on 31 days. Systems will be reviewed on an individual basis.) This includes water from a system's own sources and all other sources of water (i.e. purchased water).

Firm Capacity: Adequate pumping equipment and/or treatment capacity (excluding coagulation, flocculation and sedimentation) to meet peak daily demand, when the largest pumping unit or treatment unit is out of service. The value is represented in MGD.

Firm Capacity Deficit or Surplus = (Firm Capacity - Total Peak Daily Demand): The difference between the Firm Capacity and the sum of the peak daily demand and committed daily demand. This is a measure of the physical ability to provide treated water at adequate pressure when the largest pumping unit or treatment unit is out of service. Negative values indicate a shortfall in Firm Capacity.

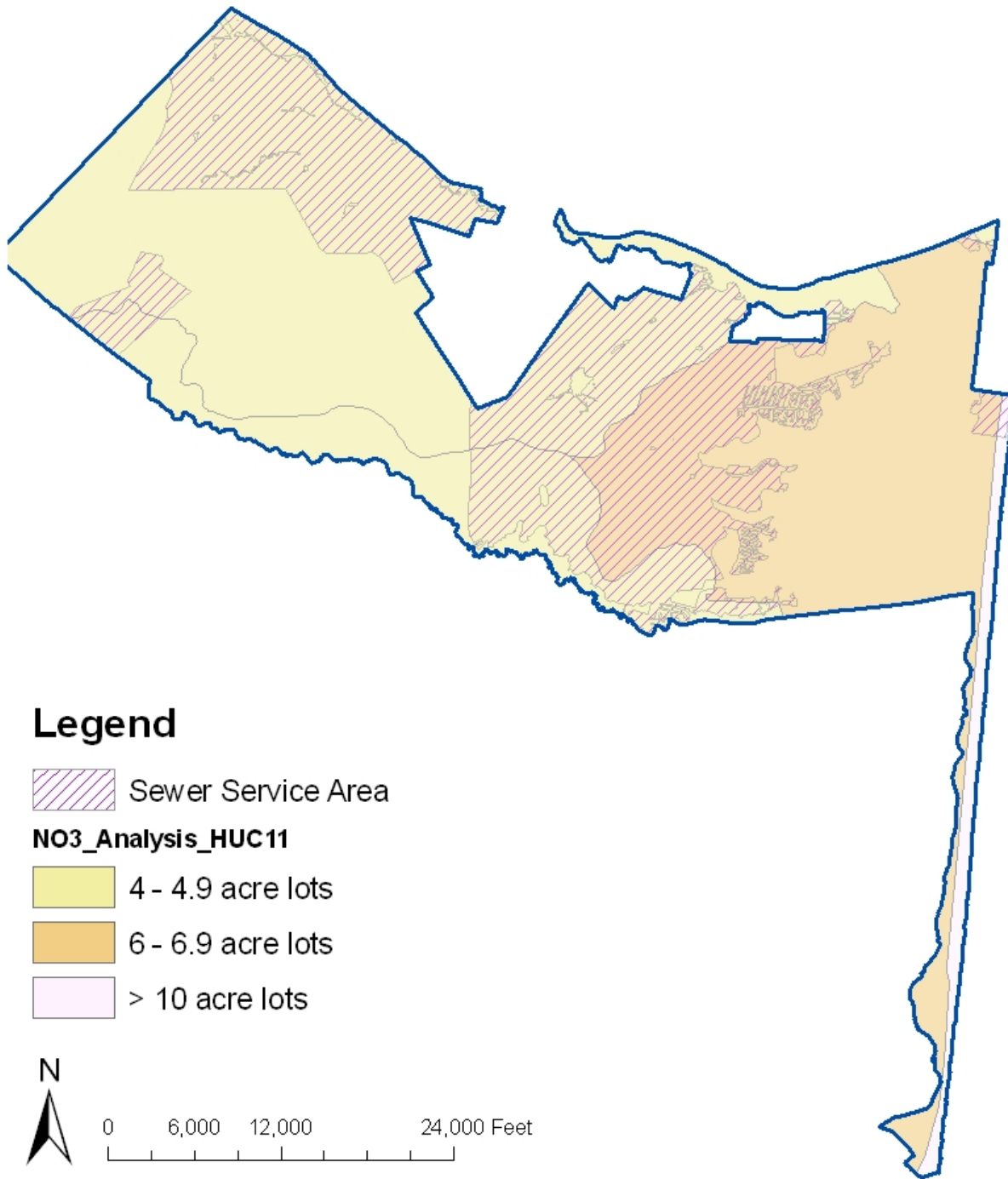
Requested Allocation: The amount of water the public water system is requesting as part of its water allocation permit application, including existing allocations. This value is represented in MGM and MGY.

Total Peak Water Demand: The sum of the public water system's current peak demand and committed peak demand. The value is represented in MGD, MGM, and MGY.

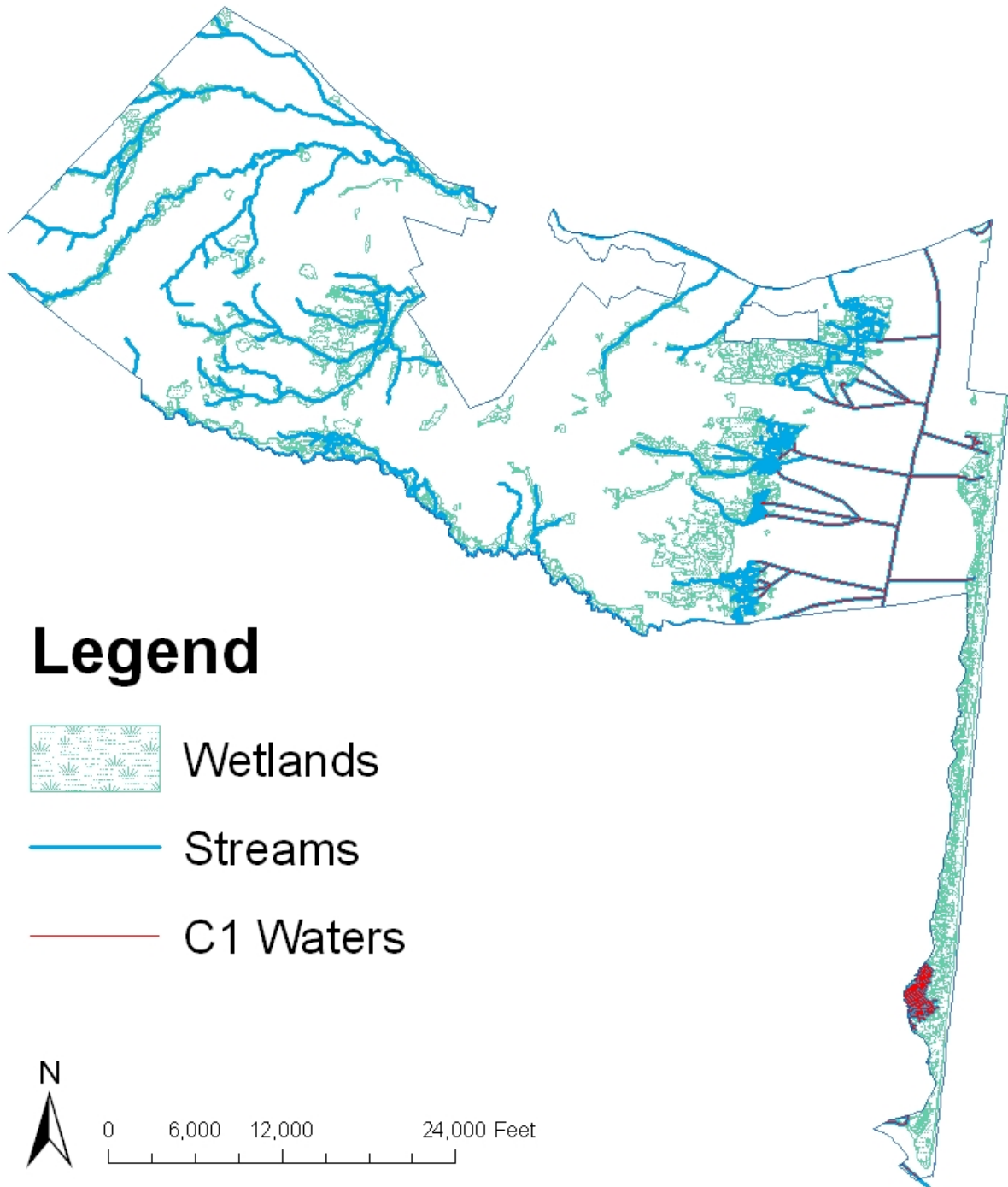
Total Available Water Supply: The sum of the Allocation Limit and Contract Limit. This value is represented in MGM and MGY.

Water Supply Deficit or Surplus = (Total Water Allocation Permit Limit- Total Peak Demand): The monthly and/or annual limitations of an Allocation Permit minus the sum of the monthly and/or annual demands recorded based on the water use records plus the monthly and/or annual demand projected for approved but not yet constructed projects. Negative values indicate a shortfall in diversion privileges or available supplies through bulk purchase agreements.

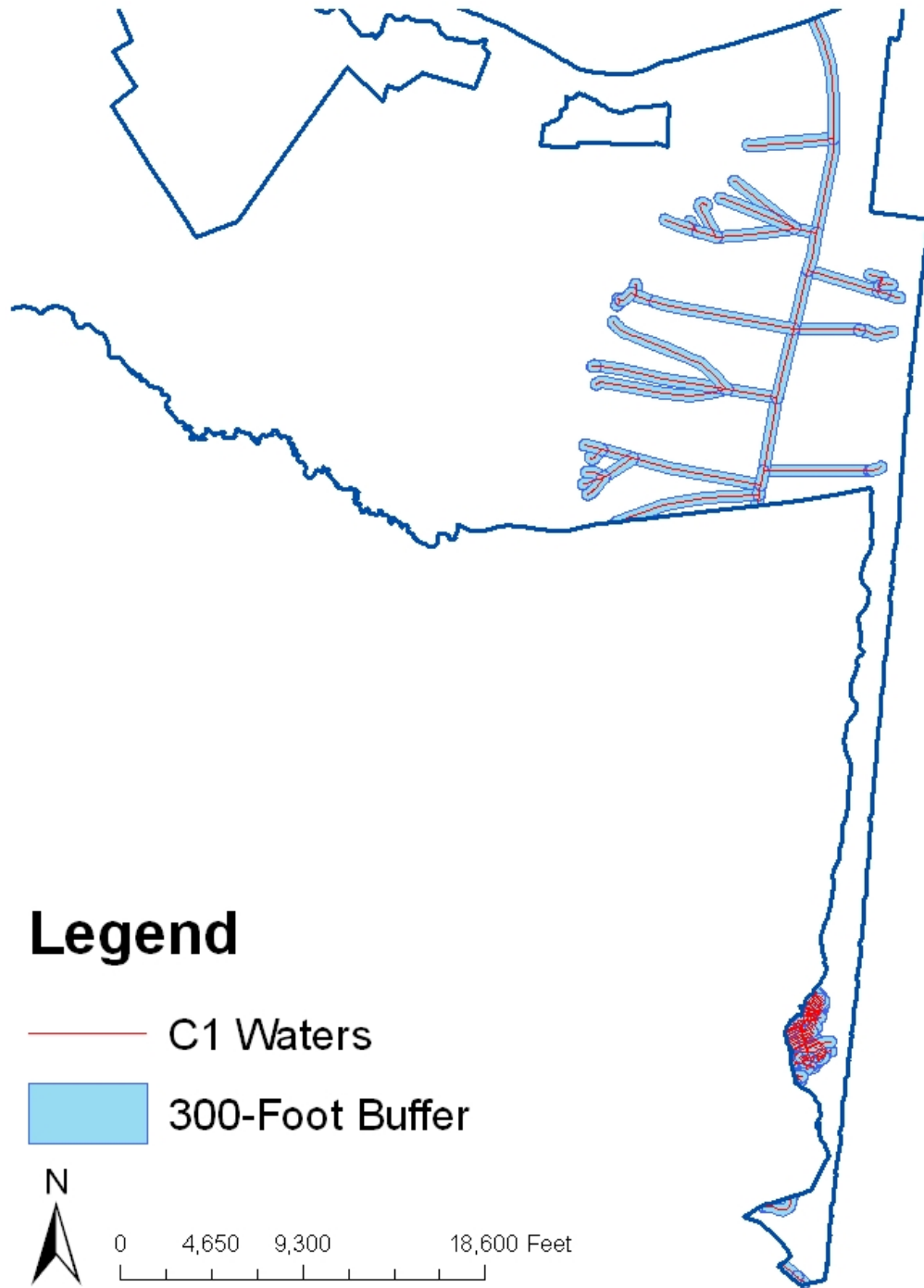
Sewer Service Areas and HUC-11 Analysis



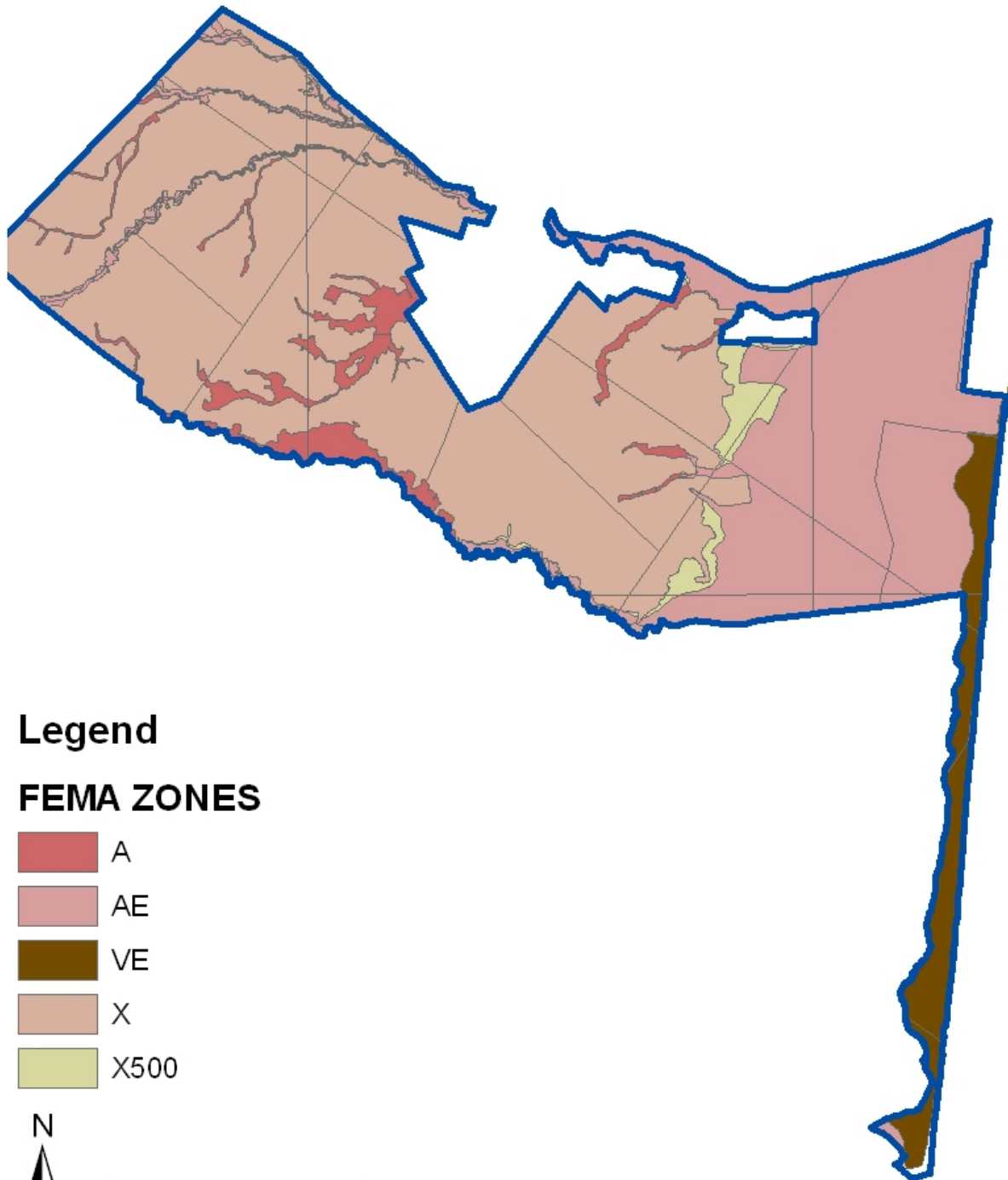
Wetlands, Streams, and Catagory One Streams



C1 Streams and 300-Foot Buffer

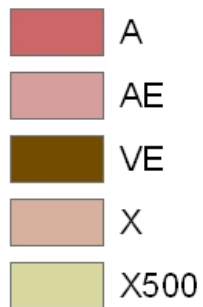


FEMA Flood Zones



Legend

FEMA ZONES



0 5,000 10,000 20,000 Feet

Flood Hazard Areas (We may need to double check zones... add information if necessary)

Flood hazard areas identified on the Flood Insurance Rate Map are identified as a Special Flood Hazard Area (SFHA). SFHA are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30. Moderate flood hazard areas, labeled Zone B or Zone X- 500 (shaded on a FIRM map) are also shown on the FIRM, and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X (unshaded on a FIRM map). (ANI- Area Not Included)

- **Zone A**

Areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.

- **Zone AE**

Areas subject to inundation by the 1-percent-annual chance flood event determined by detailed methods. Base Flood Elevations (BFEs) are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.

Flood insurance is available for all eligible buildings within a community that participates in the NFIP. However, the NFIP currently has no floodplain management criteria for B, C, and X Zones—those areas that lie outside of the SFHA—and no requirements for communities to take action to reduce or prevent losses in these areas. The result is significant financial losses for the NFIP, including the cost of insuring repetitive loss properties. Here are some statistics that show the cost of localized flooding to the NFIP:

- Since 1978 the NFIP has paid over \$2.8 billion in claims in B, C, and X Zones.
- Of that, \$1.1 billion was paid for claims on repetitive loss properties.
- Between 20 percent and 25 percent of all repetitive loss properties are rated as being in B, C, and X Zones.
- In some communities, over half of the repetitive loss buildings are in B, C, and X Zones.

What is Localized Flooding?

Localized flooding refers to flooding outside the scope of criteria that apply to the SFHA as depicted on a community's FIRM. This includes areas within and outside the B, C, and X Zones.

Such floods are often referred to as:

- stormwater flooding
- nuisance flooding
- flooding on small streams
- carpet wetters

- poor drainage
- ponding

Familiarize yourself with these terms to help identify a flood hazard:

Flood Watch:

Flooding is possible. Tune in to NOAA Weather Radio, commercial radio, or television for information.

Flash Flood Watch:

Flash flooding is possible. Be prepared to move to higher ground; listen to NOAA Weather Radio, commercial radio, or television for information.

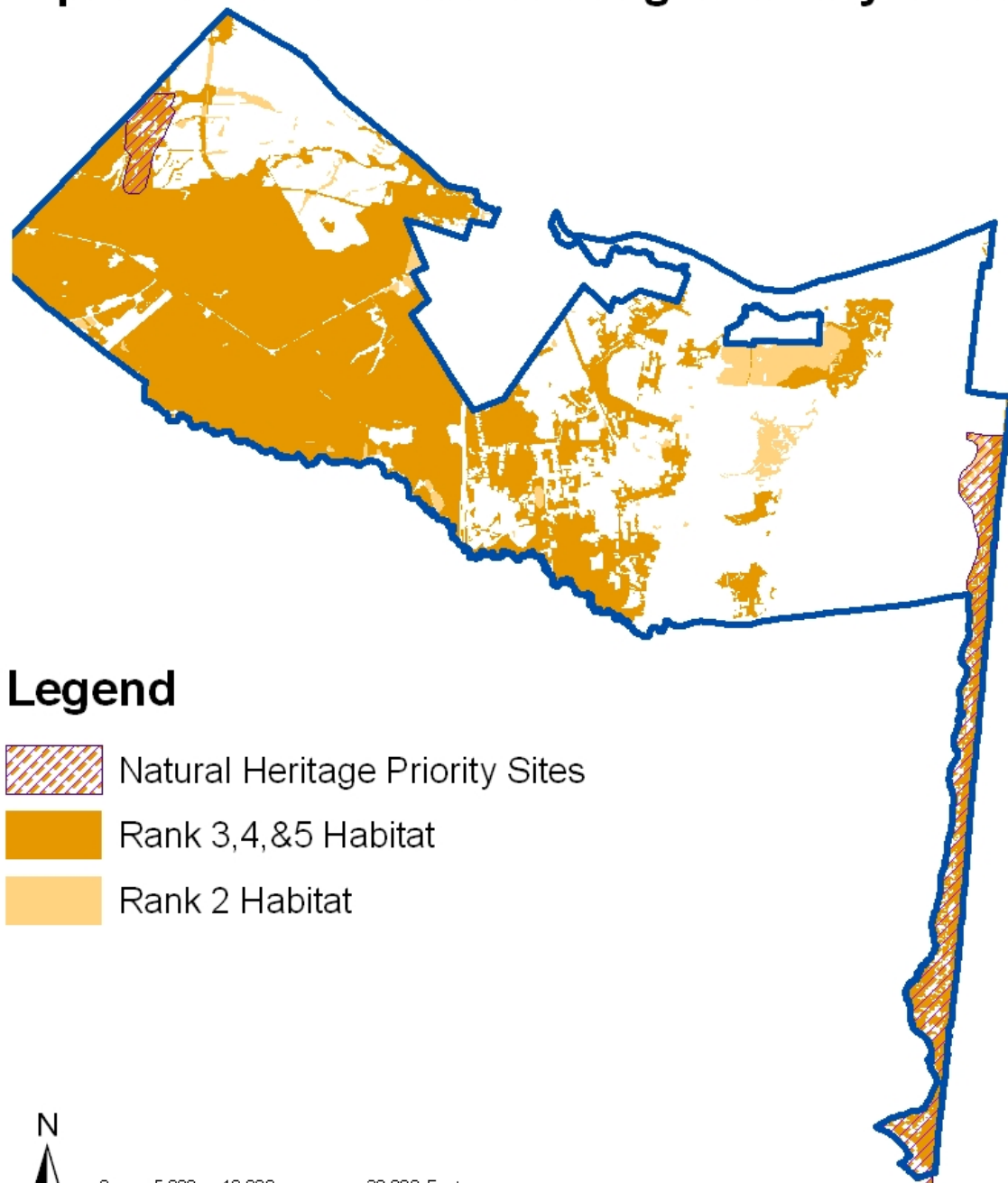
Flood Warning:

Flooding is occurring or will occur soon; if advised to evacuate, do so immediately.

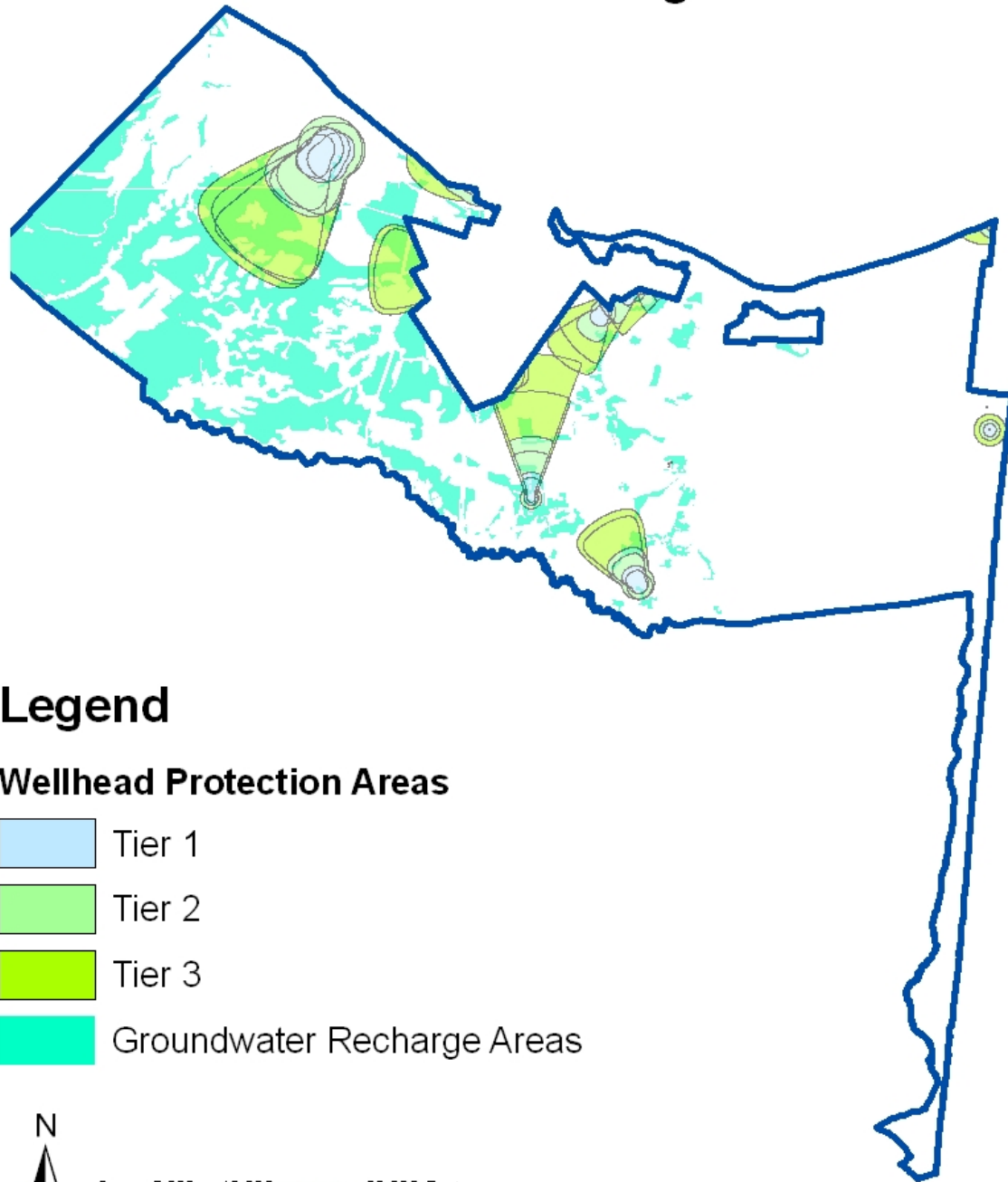
Flash Flood Warning:

A flash flood is occurring; seek higher ground on foot immediately.

Endangered, Threatened, & Priority Species Habitat and Heritage Priority Sites


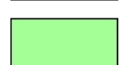




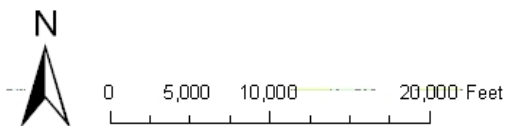
Wellhead Protection and Groundwater Recharge Areas



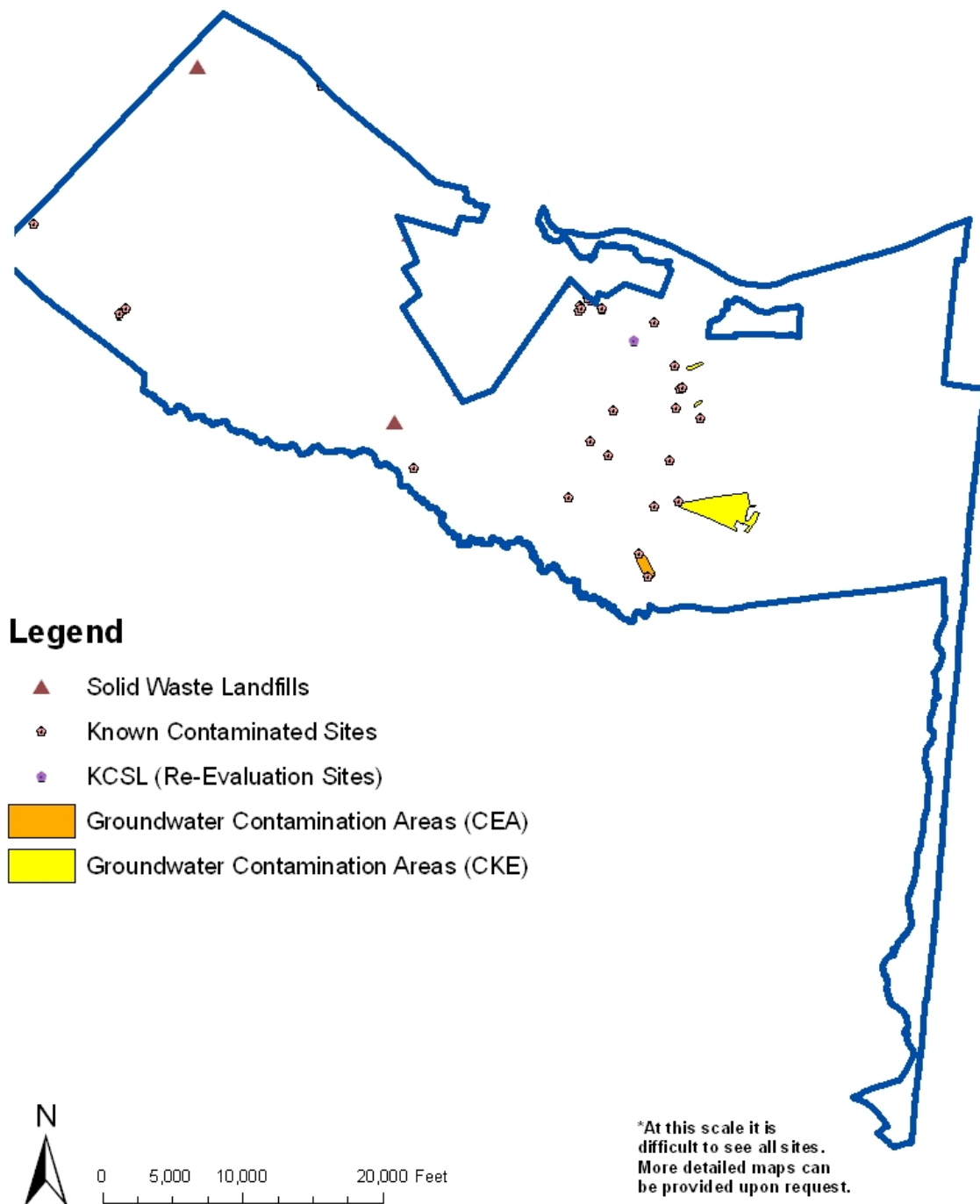
Legend

Wellhead Protection Areas

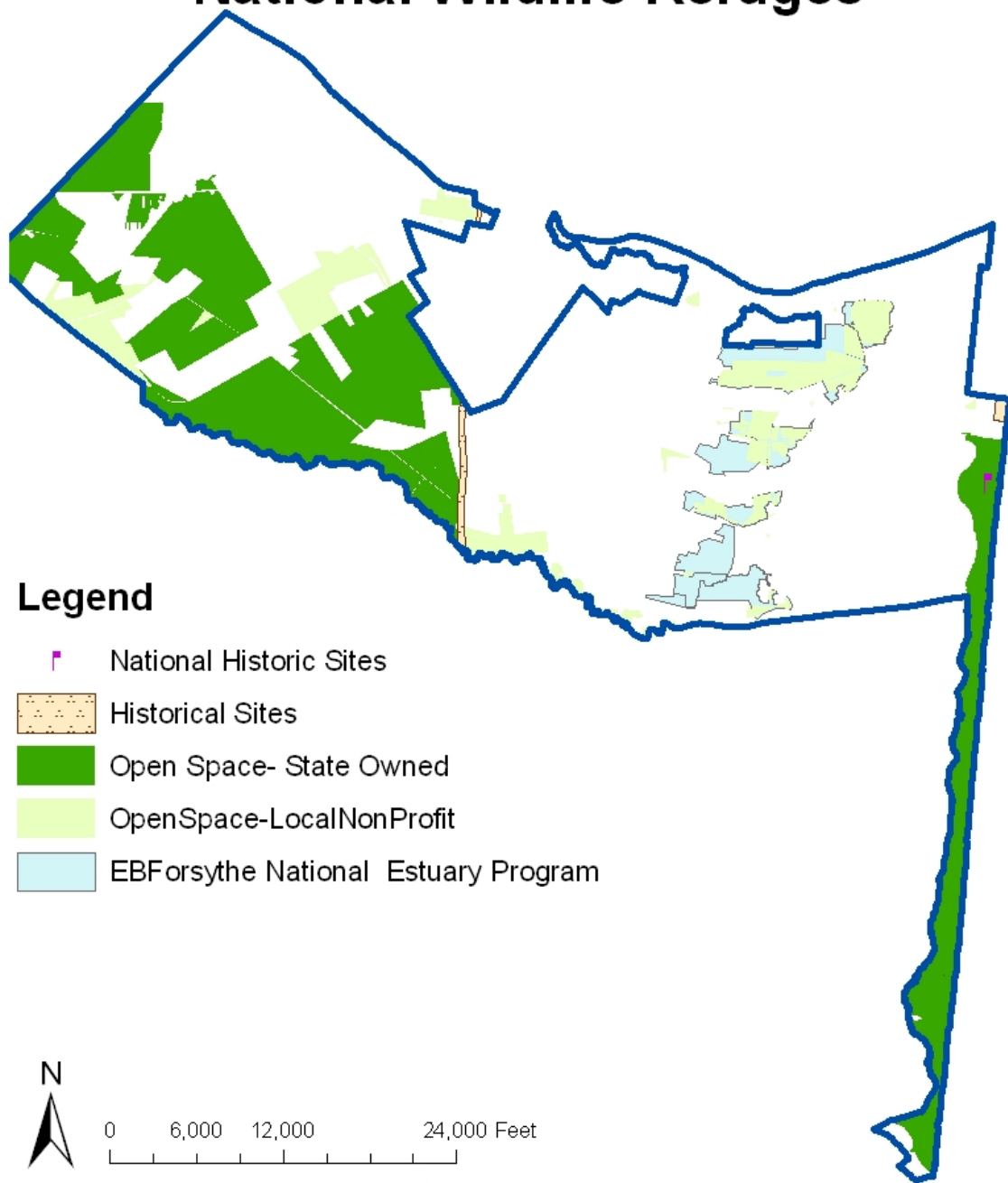
-  Tier 1
-  Tier 2
-  Tier 3
-  Groundwater Recharge Areas



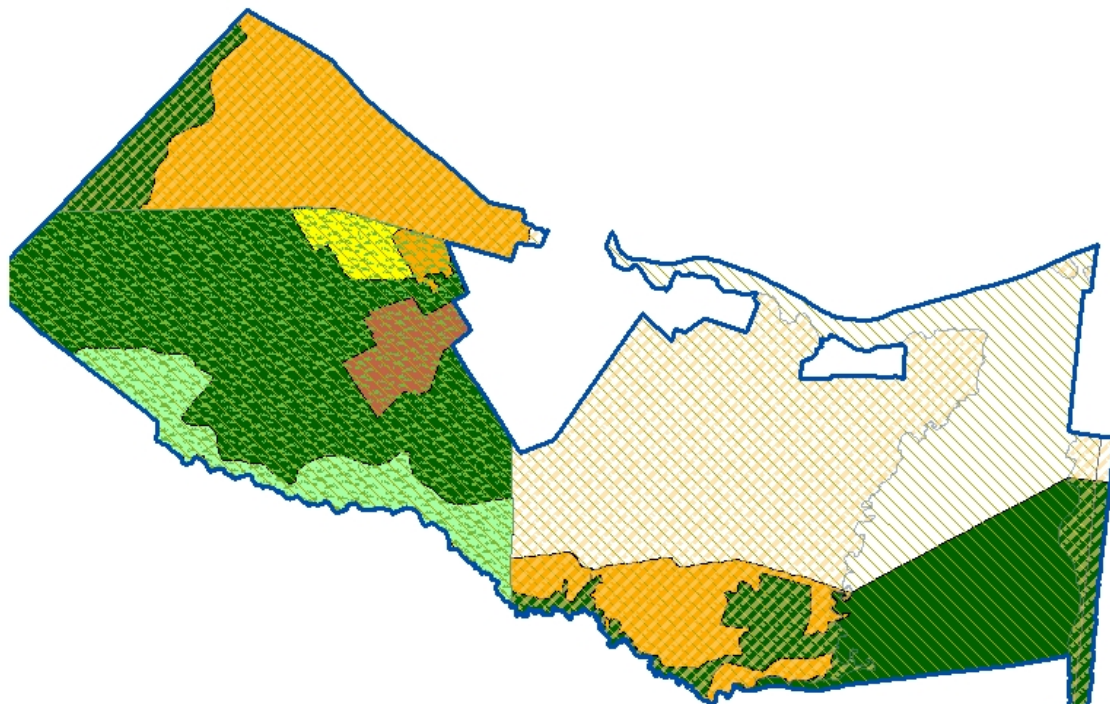
Contaminated Areas Considerations*



State and Local Open Space, Historic Sites, and National Wildlife Refuges



Regional Planning Areas

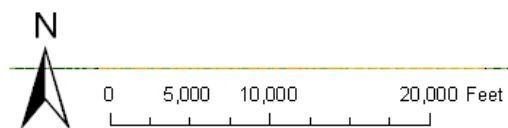


Legend

-  CAFRA
-  Barnegat Bay Estuary Program
-  Pinelands

Pinelands Management Areas

-  Agricultural Production Area
-  Forest Area
-  Preservation Area
-  Regional Growth Area
-  Rural Development Area



NJDEP Office of Planning and Sustainable Communities

The Office of Planning and Sustainable Communities was formed to facilitate the Department's move toward a proactive planning approach based on principles of sustainability and environmental capacity-based planning.

Mission

To coordinate the [sustainable development](#) and [environmental capacity-based planning](#) policies of the Department and proactively work with other state agencies, regional entities, local governments and other groups to incorporate these policies into all levels of land use and environmental planning.

Background

In January, 2007, the Department of Environmental Protection (DEP) adopted its [Policy Priorities and Action Plan](#) which outlines the strategic direction of the agency over the next three years. The Plan identifies eight broad goal areas and underlying objectives.

One of the eight goal areas is Sustainable Growth:

Maximize use of department resources to encourage sustainable growth and livable communities by incorporating consistent criteria for the protection of natural resources and development of smart growth and green design principles into DEP rulemaking, priority setting and planning efforts, other state smart and economic growth priorities, and in regional and local planning efforts.

The first objective of this goal is:

“Incorporate sustainable growth and environmental protection criteria into state, regional and local planning.”

At the core of this goal is a recognized need for more progressive statewide environmental planning by the Department to help inform the local land use development and redevelopment process. Historically, the Department has engaged primarily in environmental planning in targeted areas based on statutory direction. Critically important work has been done in such areas as water quality management planning, water supply master planning, habitat protection planning (Landscape Project) and county/state solid waste planning. DEP is now committed to ensuring that these various planning programs are integrated and coordinated so that our guidance to regional and local planning agencies is consistent, comprehensive and supportive of both local and state priorities.

In a significant business practice improvement, DEP is also committed to implementing the Sustainable Growth goal by broadening the scope of its major project review process by requiring consideration and rewarding incorporating of green design the principles and practices.

The Department's extensive and innovative application of information technology systems, such as the New Jersey Environmental Management System (NJEMS), DEP's Geographic Information System, [i-MapNJ](#), and [Data Miner](#) now provide us with unprecedented opportunities to share information to help guide the development and redevelopment process.

Taken together, our advances with information technology and business practice reform now enable us to engage in progressive environmental planning to address such pressing statewide issues such as sustainable growth, environmental justice, greenhouse gas emissions reduction, and water resource protection in new, innovative ways.

Office of Planning and Sustainable Communities

401 E. State Street, 7 Floor East

P.O. Box 402

Trenton, NJ 08625-0402

Phone: (609) 341-5311

Fax: (609) 292-3268

NJ DEPARTMENT OF TRANSPORTATION

**State Development and Redevelopment Plan
Plan Endorsement
Opportunities and Constraints Analysis**

For:

Township of Berkeley, Ocean County

June 18, 2008

This document constitutes the New Jersey Department of Transportation's component of the State Opportunities and Constraints Analysis conducted as part of the Plan Endorsement process. This document provides a collection of the most recent data and information that exists in the Department pertaining to transportation features, studies, projects, grants, designations and other significant issues as applicable. The document should serve as a baseline to inform the remainder of the Plan Endorsement process. It should be understood that this assessment reflects conditions as they presently exist, and that changes may occur at any time during the Plan Endorsement process.

NJDOT has examined the following categories for pertinent data:

State Highways

Route 9 – MP 84.01 – 89.35

Route 35 – MP 0 - .54, 2.58 – 2.73

Route 37 – MP 12.79 – 13.26

GSP - MP 76.83 – 78.85

Straight Line Diagram sheets are attached.

State Highway Access Management Code – Access Levels and Desirable Typical Sections

Route 9:

The existing Access Level for Route 9, MP 84.01 to 89.45 is Access Level 3 (Right-turn Access with Provision for Left-turn Access via Jughandle) and the desirable typical section is 4A (4 lanes, divided, with shoulders or parking). The proposed Access Levels and desirable typical sections (DTSs) are the same for these milepost limits with the Appendix B update. The designation of a Center would not change the proposed access classifications because they will become urban with the adoption of the updated Appendix B.

Route 35:

The existing Access Level between mileposts 0.00 and 0.26 is AL 4 (Driveway with Provisions for Left-turn Access via Left-turn Lane), and between mileposts 0.26 and 0.58 is AL (Driveway with Provision for Left-turn Access, limited by spacing requirements and safety considerations). The DTSs are 4B (4 lanes, divided without shoulders, and 2A (2 lanes with shoulders or parking), respectively. These Access Levels and DTS would not change with the proposed update of Appendix B. The designation of a Center would not affect the Access Levels for these segments. The existing Access Level between mileposts 2.48 and 3.33 is 1 (fully controlled access) and the DTS is 6A (6 lanes, divided with shoulders or parking). The proposed Access Level between mileposts 2.48 and 2.70 will remain 1 and the proposed Access Level between mileposts 2.70 and 3.33 is AL 3.

The DTS would remain the same. The designation of a Center would not affect the Access Levels for these segments.

Route 37:

The existing Access Level between mileposts 12.58 and 13.39 is 2 (Access Along Street or Interchange Only) and the DTS is 6A (6 lanes divided with shoulders or parking). The proposed Access Level between mileposts 12.58 and 13.21 would remain the same. The proposed Access Level between mileposts 13.21 and 13.39 would change to 3 (Right-turn Access with Provision for Left-turn Access via Jughandle). The DTS would remain the same. **The designation of a Center between mileposts 12.58 and 13.21 would result in an Access Level change from 2 to 3.**

Congestion Management System

According to the attached charts, this section of Route 9 is classified as “Severely Congested in the summer and throughout the year. The section is within the corridor ranked #55 on the list of 79 congested commuter corridors. The intersection of Route 9 and Iger Avenue (MP 87.13) is ranked 369 out of 372 high need signalized intersections. The intersection of Route 9 and Korman Road (MP 87.47) is ranked 170 out of 372 high need signalized intersections. The intersection of Route 9 and Sylvan Lake Blvd. (MP 88.39) is ranked 255 out of 372.

The southern section of Route 35 is “Moderately Congested” in the summer; the northern section is “Not Congested.”

This section of Route 37 is classified as “Severely Congested” in the summer. The section is within the corridor ranked #23 on the list of 79 congested commuter corridors. The intersection of Route 37 and Catalina Avenue (MP 12.82) is ranked 128 out of 372 high need signalized intersections.

This section of the Garden State Parkway is classified as “Severely Congested” in the summer.

Major Capital Projects/Initiatives and Mitigation Projects

The Route 35 Restoration, Berkeley Township to Toms River, is a capital project included in the draft FY 2009-2018 Statewide Transportation Improvement Program (STIP). Funding for construction is projected in FY 2017. The project involves pavement restoration and drainage improvements from Island Beach State Park to 6th Avenue in Toms River. It will provide increased pavement cross slopes to improve drainage collection; the replacement of pipes and inlets within the Route 35 corridor; and the construction of new pipes on the side streets west of Route 35. The new pipes from Route 35 will connect the roadway collection points to the discharge points into Barnegat Bay. Flap-valves will be provided at new discharge points to restrict the bay water from entering the pipes during a high tide.

By restoring the pavement and improving the drainage, the project will restore the functionality of Route 35, which serves the barrier island and provides connectivity to the mainland. Within Berkeley Township, the connection is through the intersection with Route 37. The improvements also include realignment of Route 35 southbound, moving Route 35 out of the residential area. The ramp from Route 35 northbound into Seaside Heights will be relocated to re-route vehicles to Grant Street rather than Sumner Avenue.

Sidewalks are included throughout the project limits. Crosswalks and back-out areas will be constructed with a different material or texture to help delineate the traveled way. Shoulder parking will be maintained; however, the shoulder widths will be increased to provide shared use for bicycles and parking.

The Ocean Gate/Korman Road intersection project calls for improvements to the westbound approach to add an additional turning lane. The project is in Feasibility Assessment.

Designated Transit Villages

Not Applicable

Designated Scenic Byways

Not Applicable

Open Local Aid Grant Projects

The Township of Berkeley is an annual applicant to receive funding from the Transportation Trust Fund Municipal Aid Program. The municipality generally succeeds in obtaining allotments from \$100,000 to \$150,000 for projects consisting of resurfacing, safety and drainage improvements. The Township received funding from the FY 2008 Municipal Aid Program for improvements to Virginia Avenue and Hoover Avenue. The allotment is \$150,000. The project scope consists of roadway reconstruction, including major drainage improvements.

The municipality was a successful recipient of Local Bikeway Program funding in FY 2001. The project comprised a bikeway along Veterans' Lane that provides access to the elementary and high schools, as well as the municipal park. The project, costing \$170,000, has been completed and closed out.

The municipality also received funding in FY 2001 under the Local Pedestrian Safety Program for the installation of sidewalks along Cranmer Road. The allotment amount was \$79,000. The project has been constructed and closed out.

Finally, Ocean County has received funding from the FY 2006 SAFETEA-LU PL 109-59 for a project known as the Western Boulevard Extension. The County is to receive \$3.2 million in federal funds to construct the section of roadway from Northern Boulevard to Route 9. The project would lie within the boundaries of the proposed primary Town Center. The County envisions the roadway as an alternate to Route 9 between Lacey Township and Beachwood Borough. The present designation is for construction. Ocean County is working with Congressman Saxton's office to revise the project description so that the funds can be used for design.

Corridor Studies

The Township was an active partner in the Route 9 Integrated Land Use and Transportation Corridor Study, which sought to implement a corridor-wide vision for future development in the region. To that end, Berkeley signed a Route 9 Coalition Partnership Agreement in December

2005 that established six guiding principles:

Balance Regional Mobility and Local Access Needs
Focus on Improving Capacity Where It Counts
Reconnect and Enhance the Transportation Network
Strengthen the Community Character
Provide Alternatives to the Car
Match Growth to Infrastructure Limitations

NJDOT wishes for the municipality to continue to advance these guiding principles.

Local Planning Assistance Projects

Not Applicable

Bicycle and Pedestrian Local Planning Assistance Projects

Not Applicable

Public Use/General Aviation Airports

The Robert J. Miller Airpark (profile attached) is located on Keswick Road (CR 530) in the Township, 5 miles southwest of Toms River. In 2007, the airport received an FAA grant of \$342,105 for design and permits for a new crosswind runway, the NJDOT matching share of which was \$8,552.50. The airport also received in 2007 two state grants: \$4,750 to install grass and weed guards around lights, and \$76,000 for crack sealing on Runway 624. Finally, the airport received another FAA grant of \$2,934,937 for multiple improvement projects, the state matching share of which was \$73,368.

Rail Freight Lines

Berkeley Township presently contains only an inactive rail line. An opportunity might exist for use as a trail, barring any property ownership issues.

Traffic Engineering and Safety Initiatives

The only currently scheduled work in Berkeley Township is a general review of traffic conditions in the vicinity of Route 9 and Scott Drive, prompted by safety and congestion concerns in the area. At this time no action plan has been developed; any revisions would be done through maintenance funding.

Existing and Planned Park-and-Rides

Not Applicable

Other Significant Issues

The map depicts two proposed Town Centers. These Centers will require that Route 9 be reviewed for issues regarding access to the state highway: posted and operating speeds, signal spacings and pedestrian accommodations.

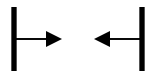
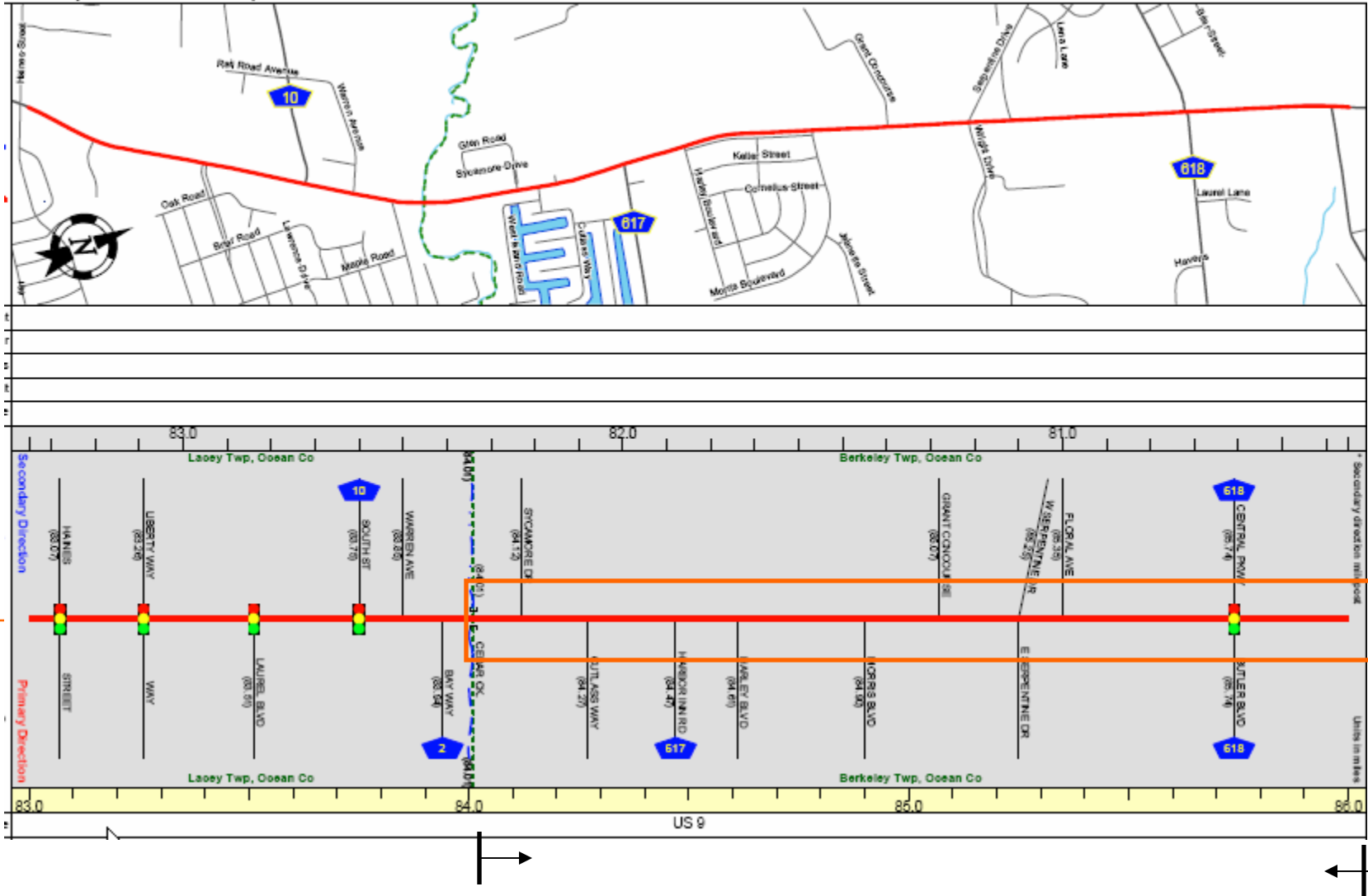
ATTACHMENTS

Straight Line Diagram Sheet
Congestion Management System Chart
Robert J. Miller Airpark Profile

NOTE: GIS data layers have been provided to the OSG GIS unit by the NJDOT GIS unit.

US 9 (South to North)

Mile Posts: 83.000 - 86.000



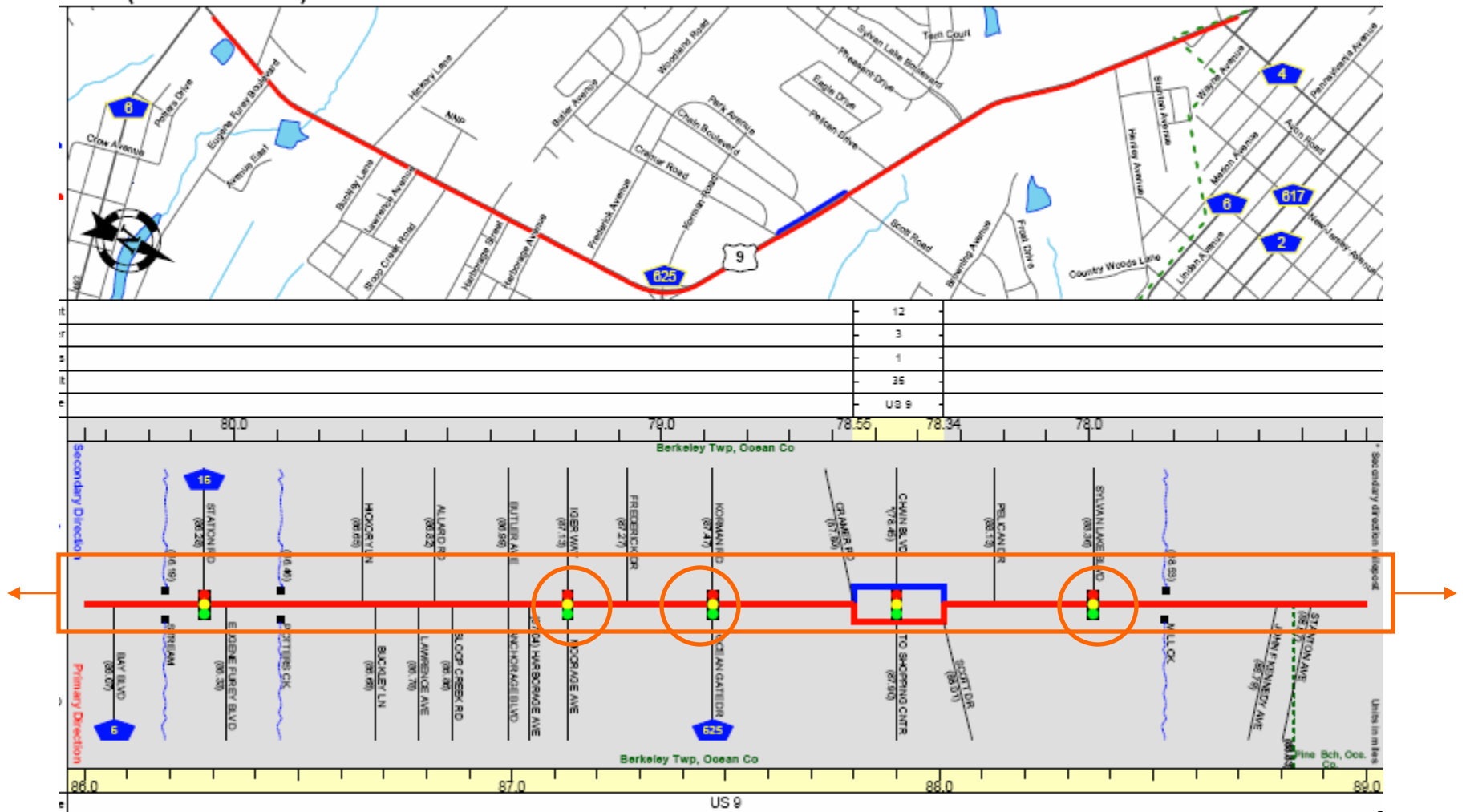
Project
Limit



Congested
Area

US 9 (South to North)

Mile Posts: 86.000 - 89.000



Congested Intersections

US 9 and Iger Way (MP 87.13)

US 9 and Korman Rd.(MP 87.47)

US 9 and Sylvan Lake Blvd. (MP 88.36)

Congested Area

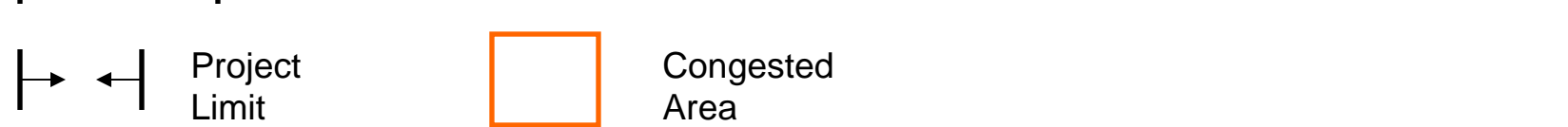
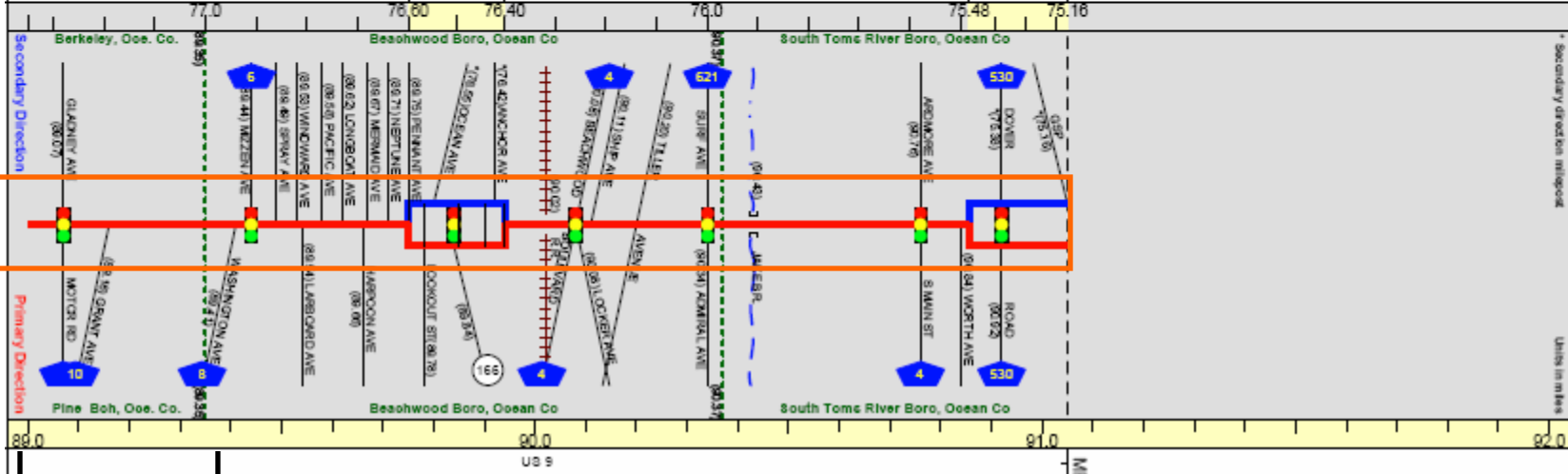
Project Limit

US 9 (South to North)

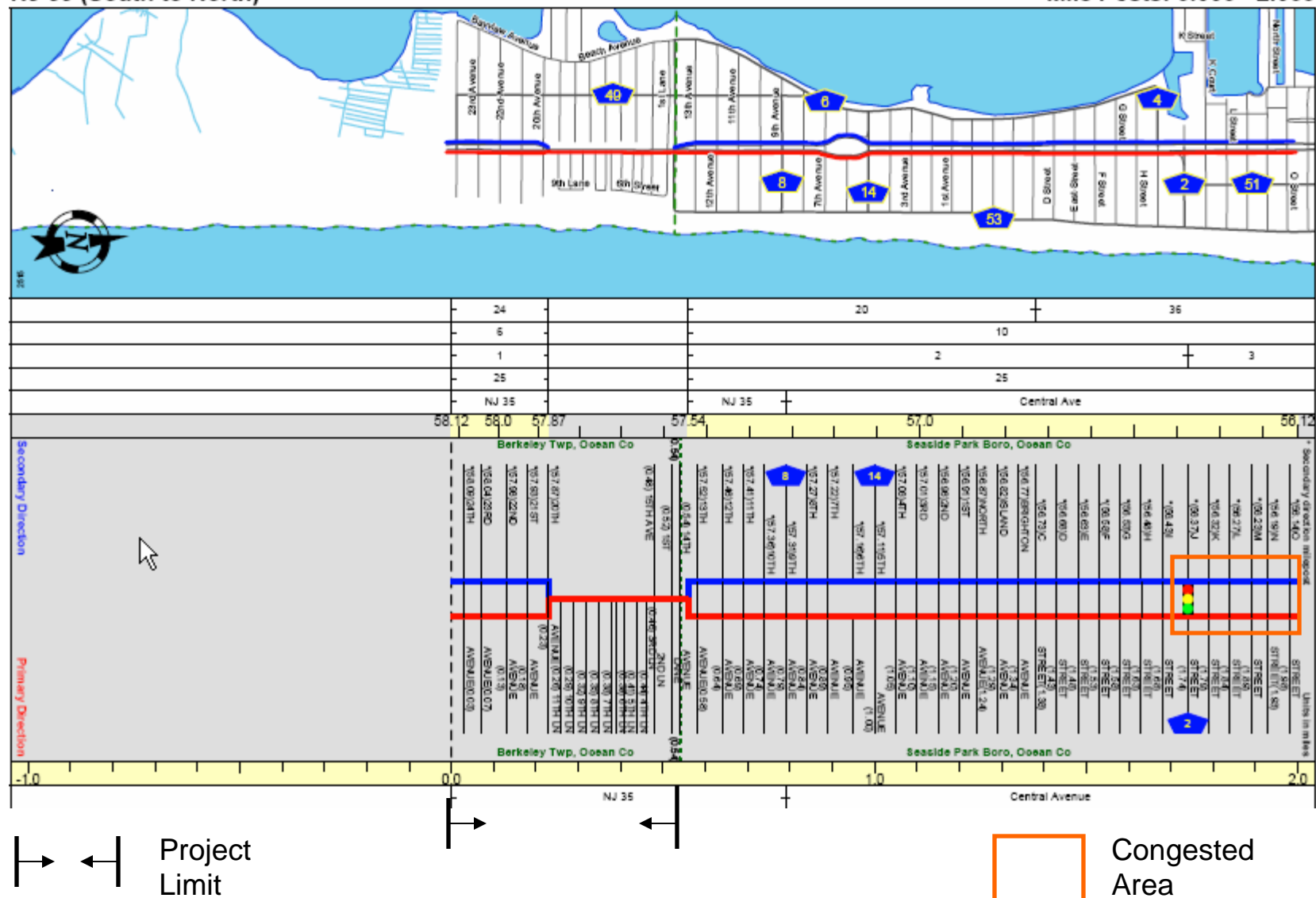
Mile Posts: 89.000 - 91.050



26	24
0	0
2	2
35	50
US 9	US 9

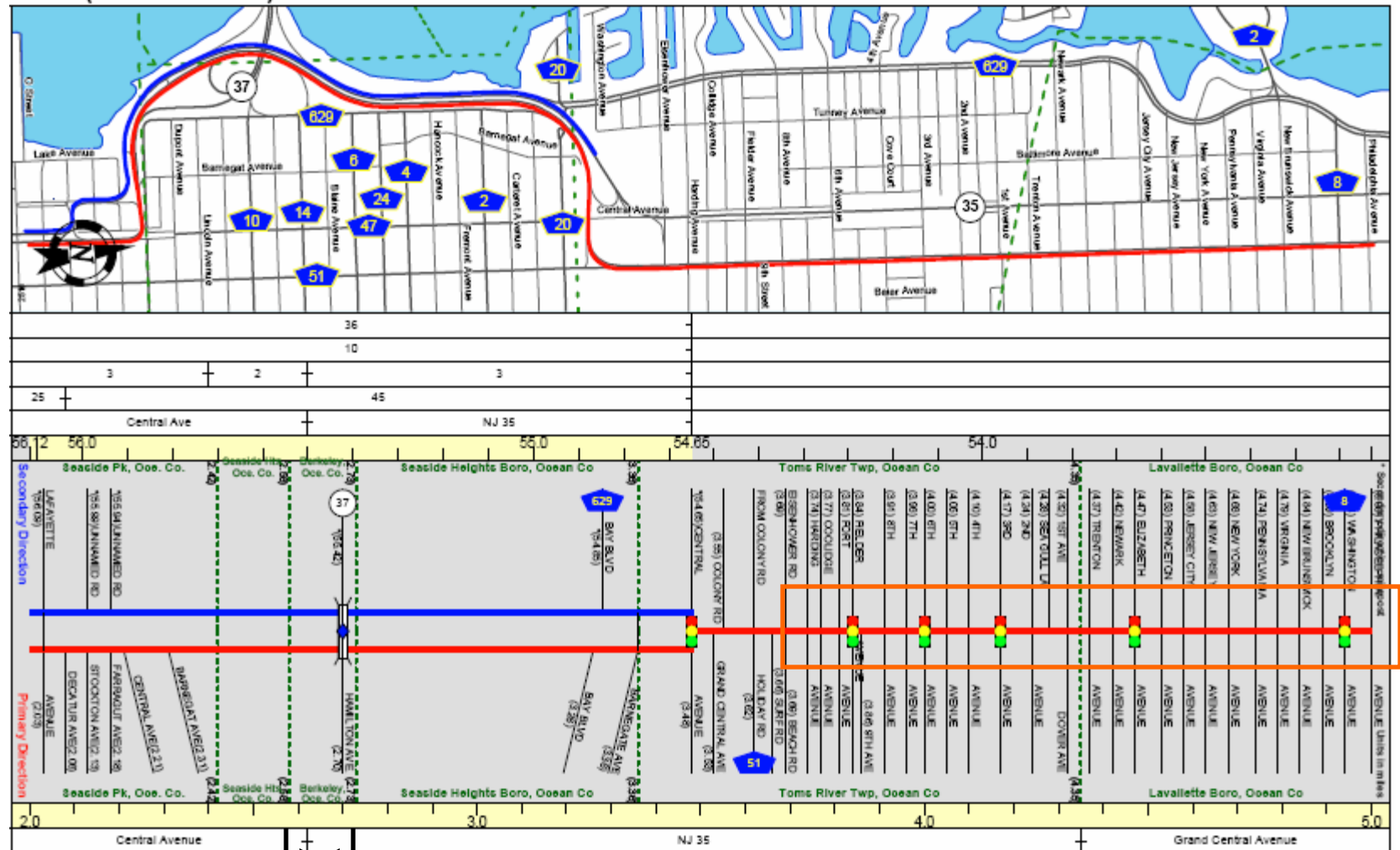


Mile Posts: 0.000 - 2.000



NJ 35 (South to North)

Mile Posts: 2.000 - 5.000

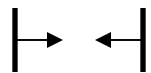
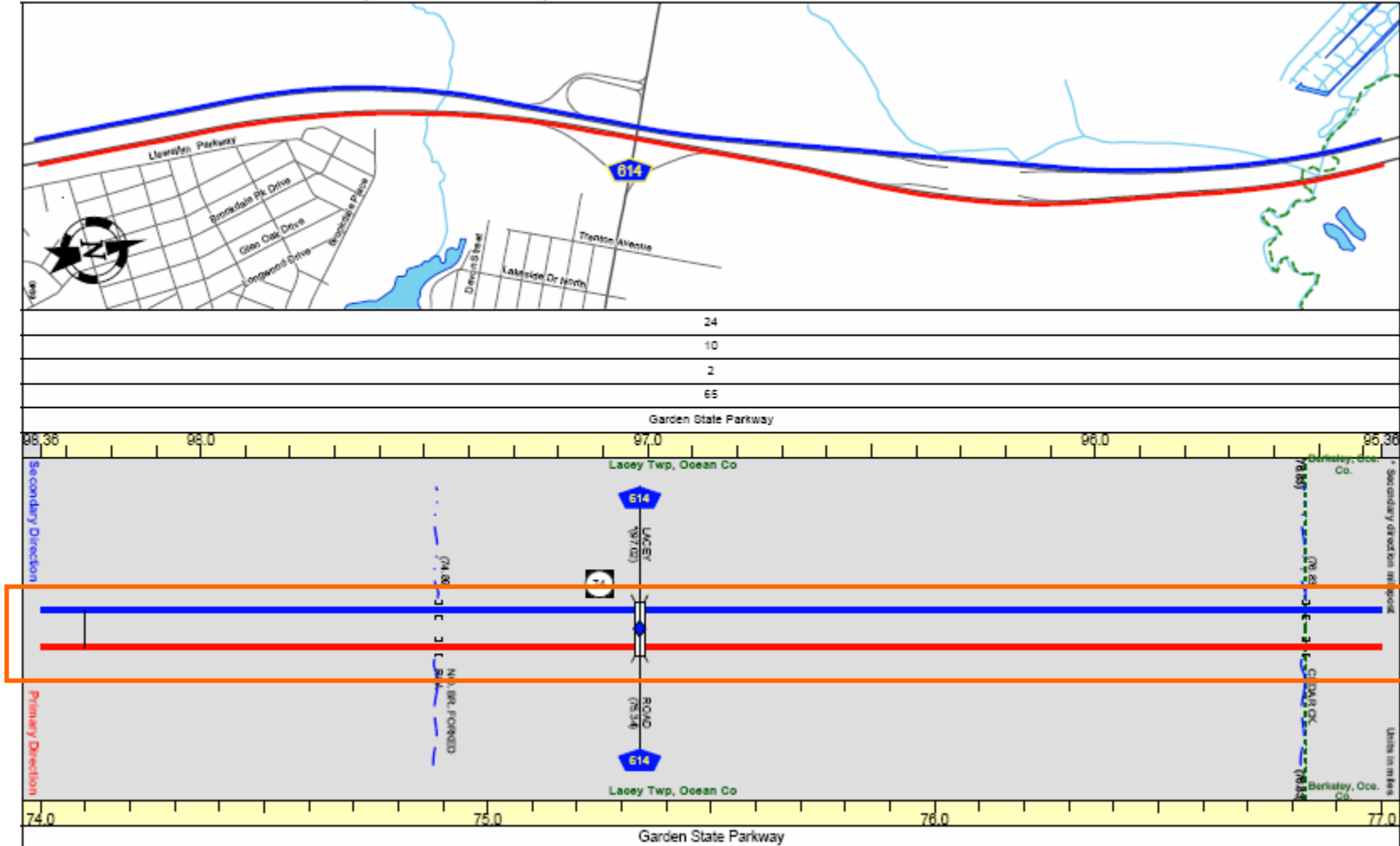


Project Limit

Congested Area

GARDEN STATE PARKWAY (South to North)

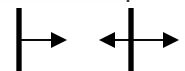
Mile Posts: 74.000 - 77.000



Project
Limit

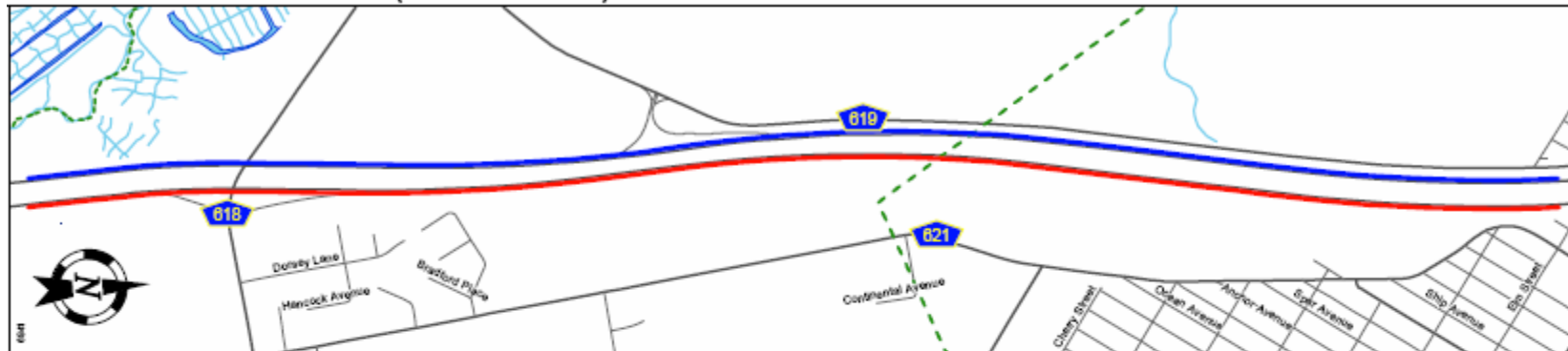


Congested
Area



GARDEN STATE PARKWAY (South to North)

Mile Posts: 77.000 - 80.000



24
10
2
65

Garden State Parkway

95.36 95.0 94.0 93.0 92.36

Berkeley Twp, Ocean Co Berkeley Twp, Ocean Co Beachwood Boro, Ocean Co

Secondary Direction
618
KINGSWAY
(74.00)



Primary Direction
618
ROAD
(77.40)

Berkeley Twp, Ocean Co Berkeley Twp, Ocean Co Beachwood Boro, Ocean Co

77.0 78.0 79.0 80.0

Garden State Parkway

77.0 78.0 79.0 80.0

Garden State Parkway

77.0 78.0 79.0 80.0

Garden State Parkway

77.0 78.0 79.0 80.0

Garden State Parkway

77.0 78.0 79.0 80.0

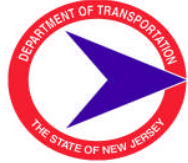
Garden State Parkway

77.0 78.0 79.0 80.0

Project Limit



Congested Area



New Jersey Department of Transportation

Bureau of Systems Development & Analysis

CMS Priority Ranking

NJ 35 (MP 0.0 - 0.54, 2.58 - 2.73), Berkeley Twp., Ocean County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2005) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	Max Summer VC	Overall Score (Summer)	CMS Link* Ranking (of 5253)	Priority Rating (Summer)	Top Percentile (Summer)	County	Rank in County (of 321)	County Top Percentile	MPO	Rank in MPO (of 3583)	MPO Top Percentile
1939	35	0.00	0.14	4729	1	2	0.82	5.08	2594	Medium	50	Ocean	221	69	NJTPA	1974	56
1940	35	0.14	0.48	4572	1	1	0.79	4.91	2729	Medium	52	Ocean	227	71	NJTPA	2064	58
1941	35	0.48	0.94	4411	2	2	0.38	2.37	4644	Low	89	Ocean	274	86	NJTPA	3198	90
1948	35	2.41	2.67	16100	2	3	0.61	6.04	1804	Medium	35	Ocean	175	55	NJTPA	1416	40
1949	35	2.67	2.94	14285	3	3	0.61	4.41	3101	Low	60	Ocean	244	77	NJTPA	2301	65

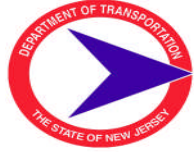
The southern section is "Moderately Congested" in the summer; the northern section is "Not Congested".



- Highest Score / Priority Ranking

RED HIGH = 7.00+ **ORANGE** MEDIUM = 5.00 - 6.99 **GREEN** LOW < 5.00

* The Congestion Management System consists of state routes and some county routes which are divided into sections of roadways identified as "Links" based on road geometry and intersecting roads. There are 5253 links on CMS which are ranked against each other.



New Jersey Department of Transportation

Bureau of Systems Development & Analysis

CMS Priority Ranking

US 9 (MP 84.01 - 89.35), Berkeley Twp., Ocean County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2005) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	Max Summer VC	Overall Score (Summer)	CMS Link* Ranking (of 5253)	Priority Rating (Summer)	Top Percentile (Summer)	County	Rank in County (of 321)	County Top Percentile	MPO	Rank in MPO (of 3583)	MPO Top Percentile
3402	9	83.40	85.10	10617	1	1	1.37	8.56	298	High	6	Ocean	68	22	NJTPA	246	7
4903	9	85.10	85.66	11388	1	1	1.38	8.87	215	High	5	Ocean	52	17	NJTPA	180	6
4904	9	85.66	86.60	12143	1	1	1.50	9.55	110	High	3	Ocean	29	10	NJTPA	95	3
3404	9	86.60	87.30	12880	1	1	1.38	9.43	117	High	3	Ocean	32	10	NJTPA	102	3
3405	9	87.30	87.60	16348	1	1	1.50	10.00	52	High	1	Ocean	10	4	NJTPA	46	2
3406	9	87.60	88.60	17250	1	1	1.50	10.00	44	High	1	Ocean	5	2	NJTPA	38	2
3407	9	88.60	89.80	19260	1	1	1.50	10.00	45	High	1	Ocean	6	2	NJTPA	39	2

This section of the roadway is "Severely Congested" in the summer and through the year.



- Highest Score / Priority Ranking

RED

HIGH = 7.00+

ORANGE

MEDIUM = 5.00 - 6.99

GREEN

LOW < 5.00

* The Congestion Management System consists of state routes and some county routes which are divided into sections of roadways identified as "Links" based on road geometry and intersecting roads. There are 5253 links on CMS which are ranked against each other.

Note: This section is within the corridor which is ranked # 55 on the list of 79 congested commuter corridors.

Note: The intersection of US 9 and Iger Ave. (MP 87.13) is ranked 369 out of 372 high need signalized intersections on State highways.

The intersection of US 9 and Korman Rd. (MP 87.47) is ranked 170 out of 372 high need signalized intersections on State highways.

The intersection of US 9 and Sylvan Lake Blvd. (MP 88.39) is ranked 255 out of 372 high need signalized intersections on State highways.

There are approximately 2500 signalized intersections on State highways.

The



New Jersey Department of Transportation
Bureau of Systems Development & Analysis

CMS Priority Ranking

GSP (MP 76.83 - 78.85), Berkeley Twp., Ocean County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2005) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	Max Summer VC	Overall Score (Summer)	CMS Link* Ranking (of 5253)	Priority Rating (Summer)	Top Percentile (Summer)	County	Rank in County (of 321)	County Top Percentile	MPO	Rank in MPO (of 3583)	MPO Top Percentile
3725	GSP	76.83	78.84	42468	2	2	1.24	9.14	163	High	4	Ocean	41	13	NJTPA	137	4

This section of roadway is "Severely Congested" in the summer.



- Highest Score / Priority Ranking

RED

HIGH = 7.00+

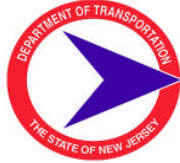
ORANGE

MEDIUM = 5.00 - 6.99

GREEN

LOW < 5.00

* The Congestion Management System consists of state routes and some county routes which are divided into sections of roadways identified as "Links" based on road geometry and intersecting roads. There are 5253 links on CMS which are ranked against each other.



New Jersey Department of Transportation


Bureau of Systems Development & Analysis

CMS Priority Ranking

NJ 37 (MP 12.79 - 13.26), Berkeley Twp., Ocean County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2005) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	Max Summer VC	Overall Score (Summer)	CMS Link* Ranking (of 5253)	Priority Rating (Summer)	Top Percentile (Summer)	County	Rank in County (of 321)	County Top Percentile	MPO	Rank in MPO (of 3583)	MPO Top Percentile
2086	37	12.42	13.11	19875	3	3	1.08	6.90	1221	Medium	24	Ocean	137	43	NJTPA	978	28
5454	37	13.11	13.42	19875	2	2	1.43	9.74	81	High	2	Ocean	23	8	NJTPA	73	3

This section of roadway is "Severely Congested" in the summer.

 - Highest Score / Priority Ranking

RED **HIGH = 7.00+** **ORANGE** **MEDIUM = 5.00 - 6.99** **GREEN** **LOW < 5.00**

* The Congestion Management System consists of state routes and some county routes which are divided into sections of roadways identified as "Links" based on road geometry and intersecting roads. There are 5253 links on CMS which are ranked against each other.

Note: This section is within the corridor which is ranked # 23 on the list of 79 congested commuter corridors.

Note: The intersection of NJ 37 and Catalina Ave. (MP 12.82) is ranked 128 out of 372 high need signalized intersections on State highways. There are approximately 2500 signalized intersections on State highways.



Robert J. Miller Airpark (MJX)
Toms River, NJ

Robert J. Miller Airpark

Mailing Address: P.O. Box 2191
Toms River, NJ
08754

Phone: (732) 240-3520

Fax: (732) 244-8396

Location: Keswick Rd. (Rt. 530)
Berkeley Twp.
5 miles SW of Toms
River

Variation: 12 West

Latitude

N 39°55.65'

Longitude

W 74°17.54'

Elevation

82'

Runways

Runway: 06-24 **Length:** 5949' **X Width:** 100' **Surface:** Asphalt

Approaches/Lighting

Approach: GPS, ILS, VOR
Lights: HIRL, dusk-dawn, pilot controlled - CTAF
Beacon: Yes

Nav aids

Type: VORTAC **ID:** CYN **Freq:** 113.4
ILS I-MJX 109.9

Services

Attended: 0800-dusk
Food: Vending
Restroom: Yes
Phone: Yes
Customs: No

Communication

Type: CTAF **Freq:** 122.7
UNICOM 122.7

APP/DEP Frequencies

Type: McGuire APP: **Freq:** 120.25
McGuire DEP: 120.25

Other

Traffic Patterns: Standard
TPA: 1000(918)
Weather: AWOS-3 at BLM (17 nm NE): 119.875: (732) 244-4450
Fees: Hangar, parking, ramp, tiedown
Fuel: 100LL, Jet A

Notes

MEMORANDUM

TO: Lorissa Whitaker, Office of Smart Growth
FROM: Alice D'Arcy, PP/AICP, Principal Planner
DATE: June 18, 2008
RE: Review of Berkeley Township/Ocean County, Municipal Self-Assessment Report

I. Introduction

Berkeley Township, Ocean County, has submitted to the Office of Smart Growth a Municipal Self-Assessment Report, dated April 2008. The Municipal Self-Assessment Report represents Step 3 of the Plan Endorsement process. The purpose of a Municipal Self-Assessment is to compile data which will inform the Community Visioning process, that is, to identify constraints and opportunities to create a vision that is achievable and realistic. COAH staff has reviewed this report and offers comments concerning the consistency of the municipal report relative to the provision of affordable housing opportunities in Berkeley Township.

II. Background

Berkeley Township received a second round Judgment of Repose from the Superior Court on October 31, 1994, and an extended Judgment of Repose on November 3, 2000. On May 16, 2006, Berkeley Township petitioned COAH for third round substantive certification. At that time, the Township's total growth share obligation consisted of a 29-unit rehabilitation share, a 610-unit prior round obligation and a Township-estimated growth share obligation of 212 affordable units. It should be noted that the Metropolitan Planning Organization (MPO) for Berkeley, i.e., the North Jersey Transportation Planning Authority (NJTPA), projected for the Township a growth share obligation of 149 affordable units. Because the Township projection was higher than the MPO's, COAH afforded the Township's number a presumption of validity.

In response to the Appellate Court's January 25, 2007 decision (*In the Matter of the Adoption of N.J.A.C. 5:94 and 5:95*, 390 N.J. Super. 1, 56 (App. Div. 2007), *certif. denied* 192 N.J. 72 (2007)), COAH recalculated each municipality's cumulative fair share obligation. The result is that Berkeley Township currently has a 63-unit rehabilitation share, a 610-unit prior round obligation and a projected growth share obligation of 557 affordable units. COAH's projected growth share obligation for Berkeley is therefore 345 units higher than the Township's projection under COAH's original growth share methodology. Berkeley must address this higher number when the Township petitions for substantive certification under N.J.A.C. 5:96 and 5:97, which petition is due by December 31, 2008.

Berkeley's November 2005 Housing Element and Fair Share Plan proposed to address the Township's cumulative fair share obligation through: credits for units created between 1980 and 1986 with controls; credits for units created between 1980 and 1986 without controls (documented by Court Master and approved by the Court); rental bonuses under prior rounds; continued cooperation with the Ocean County Rehabilitation Program; settlement agreements

with two developers pursuant to builders remedy litigation; affordable housing units provided by Ocean, Inc.; an additional credits without controls survey (units approved by the Court Master) and; a Regional Contribution Agreement with an unspecified municipality, a waiver for which is pending with COAH.

III. Comments

The Municipal Self-Assessment Report indicates that future development will most likely occur in the two proposed Town Centers (one located at the northern end of the Township adjacent to Pine Beach and Beachwood Boroughs and the second located around the intersection of Route 9 and Ocean Gate Drive), three proposed nodes along Route 9 (organized around the Foodtown, intersections of Butler Boulevard and Harbor Inn Road) and in Planning Area 2. These are among the areas where COAH foresees most affordable housing occurring.

In light of the recent revisions to COAH's substantive rules (N.J.A.C. 5:97-1.1 et seq.), Berkeley's growth share obligation has increased beyond the Township's projection in its 2005 plan. The total credits as described in the Fair Share Plan, if verified by COAH, would satisfy the Township's prior round obligation. In light of pending changes to the Fair Housing Act, however, Berkeley will not be able to enter into a new Regional Contribution Agreement. In addition, credits without controls may not be used to satisfy obligation the growth share obligation. As a result, Berkeley Township will need to identify additional mechanisms to satisfy its total fair share obligation. COAH will work with the Township on the specifics of such revisions. COAH will work with the Township on the specifics of revisions to its Fair Share Plan to address the revised number.

IV. Conclusion

As discussed above, Berkeley Township will need to identify additional ways to address its third round growth share obligation. These issues may be addressed when the Township files with COAH its revised third round Housing Element and Fair Share Plan.