V. Future County Wastewater Demand and Facilities

This chapter describes the build-out methodology used to project wastewater treatment demand for future sewer service areas. There are two methods used for projecting future wastewater management needs: a 25-year trend projection of future population and employment for urban municipalities and a build-out based on existing zoning for non-urban municipalities. Per NJDEP's instructions, flows from inflow and infiltration are assumed to have not changed since the previous wastewater management plan.

Analysis of Municipal Zoning

As a service to all municipalities in Middlesex County, the MCOP conducted a build-out analysis to model the population and employment of the County when all lands have been developed to their maximum zoning density. To do this the MCOP staff used the legal limits established in zoning ordinances to project the future density permissible in the County. This analysis began with the creation of a layer in GIS reflecting the legally established zoning of the County's municipalities.

The zoning GIS layer was created using the most currently available municipal zoning ordinances and maps, which were digitized by the MCOP staff. Once the zoning layer was complete, a copy was created to portray the County in a state of maximum build-out. This layer was intersected with a layer depicting the boundaries of the sewer service area, allowing the MCOP staff to draw a distinction between septic and proposed sewer service areas of the county. All areas considered not further developable, including beaches, open space (including State, County, and Municipal Parks as well as Private Open Space and Preserved Farms), recently disturbed land, riparian buffers, state threatened and endangered species habitats, surface water, urban land use, and wetlands, were removed from this layer.

This layer, reflecting zoned densities and sewer service areas, was used to determine the maximum units and floor area legally permitted under current laws in each municipality's sewer service area. Finding this figure begins by finding the acreages for each zone in each town using the previously discussed layer. To make the figure more accurately reflect reality, a discount of 30 percent was applied to the acreages involved to account for such land uses as rights of way, athletic fields, and unbuildable lots. Once discounted, the acreages of residential zones were multiplied by the legally allowed units per acre, leaving zoned units. The commercial acreages were converted to square feet, and then multiplied by the legal floor area ratio. Areas which permit both commercial and residential uses were halved, and the resulting 50 percent of the total was used in each of the commercial and residential groupings, to estimate the way mixed use areas undergo both kinds of land use development. A visual representation of this analysis can be found in Appendix L as "Map B" for each municipality.

Municipal Demand Projections in Non-Urban Municipalities

In the case of non-urban municipalities, the zoning build-out analysis described above serves as the basis for predicting future wastewater demand. In these municipalities it is anticipated that development of vacant land will be the primary driver of future wastewater treatment needs. Further, because external market and economic forces, such as interest rates, are a dominant factor in determining the rate of construction, this analysis assesses the ability to provide wastewater treatment while protecting surface and ground water quality for the entire projected build-out allowable by zoning. There are two separate methods employed for calculating future wastewater generation at build-out in non-urban municipalities depending on the wastewater service area designation.

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Future Wastewater from Non-Urban Municipalities' Sewer Service Areas

In designated sewer service areas, the derived build-out for undeveloped land area were used in conjunction with NJDEP planning flow rate criteria from N.J.A.C. 7:14A to calculate anticipated future wastewater flows in the sewer service areas based on the type of development projected. For commercial areas, flow is a function of square footage. In each municipality, the zoned developable floor area (expressed in square feet) for commercial areas was multiplied by 0.1, representing the amount of sewerage flow per square foot for commercial land use, as stipulated by the NJDEP.

In residentially zoned sewer service areas, the NJDEP stipulated rate for flow projection is 300 gallons per unit per day. In each sewer service area, the amount of total allowed developable units was multiplied by this rate. For example, single-family residential development is assumed to consist of houses having three or more bedrooms per house, and each projected new house is multiplied by 300 gallons per day to predict the future wastewater generated. The resultant figure was the gallons per day estimated to result from the complete build-out of the available residentially zoned land.

Build-out data for each municipality is presented in Tables 20A through 20F, which provide a breakdown of the acreage of land available within each general zone of the municipality, based on the build-out analysis. The projected wastewater data is also aggregated by the wastewater treatment plant and presented as the future flow in facilities tables in Table 21 for comparison to the existing permitted capacity of each facility. This wastewater projection data is also aggregated by public water supply service area and wastewater treatment plant to facilitate an understanding of future depletive water uses in tables presented in Appendix C.

Future Wastewater Demand from Non-Urban Municipalities' Septic Areas

Having dealt with conventionally sewered areas, the MCOP staff undertook a similar process to analyze septic areas. Once again land was split into residential, commercial, and mixed areas. Mixed was again split between the two categories, which were converted into zoned units and zoned square footage, respectively, after the application of the 30 percent discount. As per NJDEP guidelines, residential areas were then multiplied by 500 gallons per unit, while commercial areas were multiplied by .125 gallons per square foot of commercial area. As in the sewered area, these calculated sewerage flows were then tabulated by municipality and HUC.

Municipal Demand Projections in Urban Municipalities

The Water Quality Management Planning Rules define urban municipalities as those municipalities where less than 10 percent of the total land area of the municipality is "available land for development" after subtracting out permanently preserved open space, rights-of-way, surface water, and wetlands. The urbanized municipalities in Middlesex County are Carteret, Edison, Helmetta, Highland Park, Jamesburg, Metuchen, Middlesex, New Brunswick, North Brunswick, Perth Amboy, Piscataway, Plainsboro, South Plainfield, South River, Spotswood, and Woodbridge. Ten of these urbanized municipalities are located north of the Raritan River and eight to the south of the Raritan River. Table 17 lists the County's urbanized municipalities and their respective percentages of undeveloped land.

Table 17 lists the municipalities that meet NJDEP's definition of an urbanized municipality. In these municipalities it is assumed that redevelopment of previously developed portions of the municipality will make up the majority of the future wastewater management needs. Therefore, an application of zoning to the undeveloped and developable land area in these municipalities may underestimate their future wastewater management needs. In these municipalities, a 25-year wastewater projection based on population and employment projections has been used to project future wastewater generation, and was developed by the Middlesex County Office of Planning.

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Municipal Demand Projections in Urban Municipalities (continued)

Table 17
Determination of Urbanized Municipalities

Municipality	% Undeveloped
Carteret	2%
Dunellen	0%
Edison	5%
Helmetta	7%
Highland Park	4%
Jamesburg	3%
Metuchen	4%
Middlesex	3%
Milltown	3%
New Brunswick	4%
North Brunswick	9%
Perth Amboy	4%
Piscataway	8%
Plainsboro	5%
South Amboy	10%
South Plainfield	2%
South River	5%
Spotswood	5%
Woodbridge	4%

In these urban municipalities it is assumed that redevelopment of previously developed portions of the municipality will make up the majority of the future wastewater management needs. Therefore, an application of zoning to the undeveloped and developable land area in these municipalities may underestimate their future wastewater management needs.

In these municipalities, a 25-year wastewater projection based on population and employment projections has been used to project future wastewater generation and was developed by the Middlesex County Office of Planning. Flow projections were based on the resulting projected numbers of residents and jobs. For job numbers, the MCOP staff used a 25 year projection created by the North Jersey Transportation Planning Authority. These figures were multiplied by 25 gallons per employee, per day, to arrive at projected flows.

For population figures, a more involved route was undertaken by MCOP staff. Using 25 years of historic census data, the MCOP staff created nine trend-lines that projected 25 years into the future. Lines with a trend that went below zero were eliminated, and then the line which was most central in the group was selected as most representative. If, after eliminated lines, there was an even number of trend lines, the two most central lines were selected and averaged. Once provided with a population projection by the trend lines, the MCOP staff multiplied by 75 gallons per person per day to arrive at the flow figure.

Table 18 represents the population for the listed urban municipalities through the next 25 years. The current proportion of flows from residential and commercial demands is expected to change. Use of the NJDEP methodology shows a two percent increase in flow, with a 16 percent increase in population and a 20 percent increase in jobs within urban municipalities.

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Municipal Demand Projections in Urban Municipalities (continued)

Table 18
Population Projections for Urban Municipalities Through the Next 25 Years

Municipality	2014 Population	2014 Jobs	2014 Inflow & Infiltration	2014 Total Flow (GPD)	2039 Population Projection	2039 Jobs Projection	2039 Inflow and Infiltration	2039 Total Flow (GPD) Projection	% Change 2014-2039 Flow
Carteret	24,114	8,241	742,000	3,273,858	25,887	9,844	742,000	2,929,631	-11%
Dunellen	7,417	1,050	107,000	776,800	8,119	1,340	107,000	749,421	-4%
Edison	101,970	76,926	3,146,000	15,419,795	123,583	86,831	3,146,000	14,585,493	-5%
Helmetta	2,218	212	18,000	136,593	3,438	301	18,000	283,363	107%
Highland Park	14,436	2,682	612,000	1,489,162	15,431	3,100	612,000	1,846,824	24%
Jamesburg	6,021	3,543	81,000	488,896	6,540	3,828	81,000	667,193	36%
Metuchen	13,826	6,039	339,000	1,503,567	13,280	6,986	339,000	1,509,652	0%
Middlesex	13,888	5,793	417,000	1,684,879	14,762	7,922	417,000	1,722,199	2%
Milltown	7,032	1,617	307,000	1,221,430	6,976	2,484	307,000	892,303	-27%
New Brunswick	57,080	43,024	2,034,000	11,522,268	75,402	50,617	2,034,000	8,954,575	-22%
North Brunswick	42,488	25,120	1,132,000	4,968,348	59,872	30,993	1,132,000	6,397,227	29%
Perth Amboy	52,328	14,229	804,000	5,413,153	65,578	17,544	804,000	6,160,942	14%
Piscataway	58,982	42,273	2,188,000	8,205,701	71,662	51,414	2,188,000	8,847,994	8%
Plainsboro	23,429	15,702	380,000	2,379,906	39,110	25,611	380,000	3,953,535	66%
South Amboy	8,853	2,069	110,000	731,515	8,987	2,997	110,000	858,939	17%
South Plainfield	23,960	22,756	752,000	3,660,729	26,614	25,973	752,000	3,397,382	-7%
South River	16,334	2,878	445,000	1,636,778	18,696	3,743	445,000	1,940,777	19%
Spotswood	8,447	2,321	45,000	550,349	9,071	2,819	45,000	795,806	45%
Woodbridge	100,824	56,239	2,759,000	11,690,573	107,634	69,868	2,759,000	12,578,255	8%
Ashland Aqualon (Sayreville)	N/A	N/A	N/A	289,184	N/A	N/A	N/A	289,184	0%
Chemtura (Woodbridge)	N/A	N/A	N/A	225,151	N/A	N/A	N/A	225,151	0%
Equistar Chemicals (Edison)	N/A	N/A	N/A	100,329	N/A	N/A	N/A	100,329	0%
Schweitzer-Mauduit (Spotswood)	N/A	N/A	N/A	1,542,501	N/A	N/A	N/A	1,542,501	0%
Union Carbide (Piscataway)	N/A	N/A	N/A	138,970	N/A	N/A	N/A	138,970	0%
Total	583,647	332,717	16,418,000	79,050,435	700,642	404,214	16,418,000	81,367,646	3%

Table 19
25 Year Population Projection For Urban Municipalities

	2014	10 Years (2024)	25 years (2039)	% Change
Population	583,647	630,047	700,642	20%
Jobs	332,717	461,761	404,214	21%
Inflow & Infiltration	16,418,000	16,418,000	16,418,000	0
Flow (gpd)	79,050.435	75,215,550	81,367,646	3%

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Tables for Future Wastewater from Non-Urban Municipalities' Sewer Service Areas

Table 20A
Additional Development Build-out
Township of Cranbury

Zone	Type	Floor Area Ratio	Units Per Acre	Acres Per Unit	Zoned Acres	Acres After 30% Discount	Total Zoned Units	Total Floor Area Acres
A-100	R		0.17	6.00	74	52	9	0
GC	C	0.350			5	4	0	1
HC	C	0.350			6	4	0	1
HM	C	0.350			3	2	0	1
I-LI	C	0.120			78	55	0	7
I-LI-S	C	0.300			103	72	0	22
LI	C	0.350			168	117	0	41
R-LI	R		0.25	4.00	36	25	6	0
RLD-1	R		2.18	0.46	9	6	14	0
RML III	R		12	0.08	2	2	19	0
RO-LI	C	0.350			150	105	0	37
V/HR	R		2.90	0.34	1	1	2	0

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Tables for Future Wastewater from Non-Urban Municipalities' Sewer Service Areas (continued)

Table 20B
Additional Development Build-out
Township of East Brunswick

Zone	Type	Floor Area Ratio	Units Per Acre	Acres Per Unit	Zoned Acres	Acres After 30% Discount	Total Zoned Units	Total Floor Area Acres
C-2	C	1.300			0	0	0	0
C-2(TG)	R		12.00	0.08	11	8	92	0
C-3	C	1.300			0	0	0	0
HC-2	C	1.500			5	3	0	5
HC-2(H-1)	C	0.850			0	0	0	0
HRP	R		0.50	2.00	2	1	1	0
I/M	C	1.600			156	109	0	174
I/M(O/I)	C	0.750			3	2	0	1
O-I(TG)	R		12.00	0.08	0	0	1	0
OP-1	C	0.750			9	6	0	5
OP-2	C	0.750			0	0	0	0
P-I	C	1.000			13	9	0	9
R-1	R		1.00	1.00	191	134	134	0
R-2	R		2.18	0.46	29	21	45	0
R-2(SC)	R		36.00	0.03	0	0	1	0
R-2(VGI)	R		3.00	0.33	11	8	24	0
R-2 (VGII)	R		6.00	0.16	18	12	74	0
R-2 (VGIII&A)	R		8.00	0.13	1	0	4	0
R-3	R		2.90	0.34	68	48	138	0
R-3(TG)	R		12.00	0.08	0	0	3	0
R-3(VGII)	R		2.90	0.34	16	11	33	0
R-3 (VGIII&A)	R		2.00	0.50	3	2	4	0
R-4	R		4.36	0.23	0	0	1	0
R-5	R		2.18	0.46	7	5	10	0
RP	R		0.17	5.88	139	97	17	0
RP-3	R		0.50	2.00	66	46	23	0

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Tables for Future Wastewater from Non-Urban Municipalities' Sewer Service Areas (continued)

Table 20C
Additional Development Build-out
Township of Monroe
1/2

Zone	Type	Floor Area Ratio	Units Per Acre	Acres Per Unit	Zoned Acres	Acres After 30% Discount	Total Zoned Units	Total Floor Area Acres
CC	C	0.350			15	10	0	4
FHC, HD	C	0.400			28	20	0	8
FHC,LI	C	0.450			12	8	0	4
FHC, NC	C	0.350			17	12	0	4
FHC, OP	C	0.350			0	0	0	0
FHC, PO/CD	C	0.100			1	1	0	0
FHC, PRC	R		7.00	0.14	1	0	3	0
FHC, PRC-2	R		3.50	0.29	4	3	10	0
FHC, PRD-AH-AR	R		4.00	0.25	1	1	3	0
FHC, R10	R		3.48	0.29	8	5	19	0
FHC, R30	R		1.16	0.86	18	12	14	0
FHC, R3A	R		0.27	3.70	15	11	3	0
FHC, RR-FLP	R		0.15	6.67	12	9	1	0
HD	C	0.400			249	175	0	70
LI	C	0.450			158	111	0	50
NC	C	0.350			33	23	0	8
OP	C	0.350			8	6	0	2
PD-SH	R		3.70	0.27	29	20	75	0
PO/CD	C	0.100			29	20	0	2
PRC	R		7.00	0.14	7	5	36	0
PRC-2	R		3.50	0.29	257	180	631	0
PRC-3	R		3.50	0.29	46	32	112	0
PRD-AH	R		10.00	0.10	45	31	313	0
PRD-AH-AR	R		4.00	0.25	139	97	389	0
R10	R		3.48	0.29	24	17	58	0
R20	R		1.74	0.57	57	40	69	0

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Tables for Future Wastewater from Non-Urban Municipalities' Sewer Services Areas (continued)

Table 20C
Additional Development Build-out
Township of Monroe
2/2

Zone	Type	Floor Area Ratio	Units Per Acre	Acres Per Unit	Zoned Acres	Acres After 30% Discount	Total Zoned Units	Total Floor Area Acres
R30	R		1.16	0.86	785	549	637	0
R3A	R		0.27	3.70	318	223	60	0
R5	R		6.90	0.14	0	0	2	0
R60	R		0.58	1.72	263	184	107	0
R7.5	R		4.67	0.21	2	1	7	0
RR-FLP	R		0.15	6.67	198	139	21	0

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Tables for Future Wastewater from Non-Urban Municipalities' Sewer Service Areas (continued)

Table 20D
Additional Development Build-out
Township of Old Bridge

Zone	Type	Floor Area Ratio	Units Per Acre	Acres Per Unit	Zoned Acres	Acres After 30% Discount	Total Zoned Units	Total Floor Area Acres
AF	R		14.00	0.07	7	5	71	0
CM	C	0.200			14	10	0	2
OG-1	C	0.250			34	23	0	6
OG-2	C	0.250			10	7	0	2
OG-3	C	0.250			20	14	0	4
OG-5	C	0.250			69	48	0	16
PRC	R		1.75	0.57	604	423	741	0
R-120	R		0.30	3.33	301	211	73	0
R-15	R		2.40	0.42	50	35	83	0
R-20	R		1.80	0.56	123	86	159	0
R-30	R		1.20	0.83	76	54	64	0
R-40	R		0.90	1.11	292	205	184	0
R-5	R		7.00	0.14	3	2	17	0
R-6	R		5.50	0.18	21	15	82	0
R-7	R		4.50	0.22	2	2	7	0
R-9	R		4.00	0.25	2	1	4	0
SD-1	C	0.250			8	5	0	1
SD-3	C	0.250			279	195	0	49
SD-5	C	0.250			4	3	0	1
TCD/1A	C	0.350			3	2	0	1
TCD/2	C	0.350			1	1	0	0
TCD/3A	R		2.40	0.42	6	4	10	0
TCD/3B	R		2.40	0.42	3	2	4	0
TCD/3C	R		2.40	0.42	2	1	4	0
TCD/ARC	C	0.090			78	54	0	5
TCD/R-40	R		0.90	1.11	37	26	23	0
TCD/R-80	R		0.50	2.00	24	17	8	0

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Tables for Future Wastewater from Non-Urban Municipalities' Sewer Service Areas (continued)

Table 20E
Additional Development Build-out
Borough of Sayreville

Zone	Type	Floor Area Ratio	Units Per Acre	Acres Per Unit	Zoned Acres	Acres After 30% Discount	Total Zoned Units	Total Floor Area Acres
B-2	C	1.500			1	0	0	1
B-3	C	0.750			17	12	0	9
CCRA	R		1.72	0.58	13	9	15	0
G-1	R		12.00	0.08	5	3	40	0
GVB	M	0.700	14.00	0.07	0	0	2	0
I	C	2.400			361	253	0	607
JMRA	C	2.000			6	4	0	9
MW	C	0.600			19	13	0	8
P	C	0.900			27	19	0	17
PD-10	R		1.00	1.00	54	38	38	0
PD-7	R		2.10	0.48	9	7	14	0
R-10	R		4.36	0.23	17	12	53	0
R-20	R		2.18	0.46	3	2	4	0
R-5	R		8.71	0.11	0	0	1	0
R-7	R		5.81	0.17	18	15	75	0
R-7 (PRD)	R		2.00	0.50	32	22	45	0
RA-EI	C	1.250			14	10	0	12
RA-PS	C	0.750			0	0	0	0
RA-W	C	0.200			90	63	0	13
RA-W A/B/C	M	0.186	4.82		6	4	10	0
RA-W D-K	C	0.800			65	45	0	36
RA-W-J	C	0.800			1	1	0	1
RA-W-J	R		29.37		0	0	0	0
SED	C	1.800			47	33	0	60
SED-2	C	1.250			89	63	0	78

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Tables for Future Wastewater from Non-Urban Municipalities' Sewer Service Areas (continued)

Table 20F
Additional Development Build-out
Township of South Brunswick
1/2

Zone	Type	Floor Area Ratio	Units Per Acre	Acres Per Unit	Zoned Acres	Acres After 30% Discount	Total Zoned Units	Total Floor Area Acres
AH	R		12	0.08	11	8	92	0
ARRC	R		8	0.13	29	20	162	0
C-1	C	2.400			13	9	0	21
C-2	C	0.750			17	12	0	9
C-3	C	1.050			3	2	0	2
C-5	C	1.400			11	8	0	11
C-6	C	2.800			17	12	0	34
I-2	C	1.350			23	16	0	22
I-3	C	1.400			263	184	0	257
LI-2	C	1.600			1	0	0	1
LI-4	C	1.600			112	79	0	126
MF	R		17	10	30	21	355	0
MHP	R		6.38	0.16	2	2	10	0
OC	C	2.000			125	88	0	175
OP	C	0.750			50	35	0	26
OR	C	1.400			494	346	0	485
PARC	R		8.71	0.25	67	47	411	0
PRD-II sewered	R		5.5	0.18	1	1	3	0
PRDV	M	0.015	2	0	34	24	24	0
R-1	R		1	1	353	247	247	0
R-2, sewered	R		1.45	0.69	141	98	143	0
R-2, unsewered	R		1	1	34	24	24	0
R-3. sewered	R		2.18	0.46	10	7	15	0
R-4	R		4.36	0.23	16	11	50	0
RM-3	R		5.81	0.67	3	2	11	0
RR, sewered, soils not limited	R		0.5	2	17	12	6	0
RR, sewered, soils somewhat limited	R		0.5	2	7	5	2	0

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Tables for Future Wastewater from Non-Urban Municipalities' Sewer Service Areas (continued)

Table 20F
Additional Development Build-out
Township of South Brunswick
2/2

Zone	Type	Floor Area Ratio	Units Per Acre	Acres Per Unit	Zoned Acres	Acres After 30% Discount	Total Zoned Units	Total Floor Area Acres
RR, sewered, soils very limited	R		0.5	2	4	3	1	0
RR, unsewered, soils not limited	R		0.5	2	150	105	52	0
RR, unsewered, soils somewhat limited	R		0.5	2	73	51	26	0
RR, unsewered, soils very limited	R		0.33	3	28	20	7	0

Calculating Future Wastewater and Water Supply Needs and Capacity

Using the countywide information provided above regarding existing wastewater and water supply facilities, sewer service area delineation, environmentally sensitive areas, and municipal zoning to project build-out or 25 year growth projections for the listed urban municipalities, an analysis of wastewater and water supply demands was performed to determine whether existing infrastructure capacity or zoning is the constraining factor. Where zoning is more restrictive than wastewater and water supply capacity and does not conflict with the environmentally sensitive areas, no change in zoning is needed. Where the demand projections exceed available wastewater treatment or water supply capacity, either the projections must be reduced or capacity increased.

Septic System Development within Sewer Service Areas

Individual subsurface sewage disposal systems (ISSDS) for individual residences can only be constructed in depicted sewer service areas if legally enforceable guarantees are provided. Before such construction, the use of such systems will be discontinued when the depicted sewer service becomes available. This applies to ISSDS that require certification from the Department under the Realty Improvement Sewerage and Facilities Act (N.J.S.A. 58:11-23) or Individual Treatment Works Approval or New Jersey Pollutant Discharge Elimination System Permits (under N.J.A.C. 7:14A). It also applies to ISSDS which require only local approvals if the WMP acknowledges adequate arrangements for enforcement of the requirement (such as through a municipal or sewerage authority ordinance).

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Collection System Construction Within the Sewer Service Areas

Where an area is designated for sewer service but the required trunk line or collection main has not yet been constructed, dry sewer lines will be required at the discretion of each municipality to be constructed within each new development. The developments will be connected to the sewer system as line capacity is constructed.

Future Wastewater Outside of Sewer Service Areas

The default wastewater management alternative to support development in areas that are not designated as sewer service area is the discharge to groundwater of less than 2,000 gallons per day.

Table 21 summarizes the wastewater projection increases by municipality and wastewater service area.

Table 21
Future Wastewater Generation Increase by Municipality and Service Area Category

Municipality	Discharge to Surface Water (Aggregate MGD)	Discharge to Ground Water ≤2,000 gpd (Aggregate MGD of all DGW STPs)	Discharge to Ground Water >2,000 gpd (Aggregate MGD of all DGW STPs)
Carteret	-0.192	0.002	0.000
Cranbury	0.505	0.000	0.000
Dunellen	0.346	0.000	0.000
East Brunswick	2.576	0.000	0.000
Edison	-1.761	0.033	0.000
Helmetta	0.082	0.002	0.000
Highland Park	0.389	0.000	0.000
Jamesburg	0.275	0.001	0.000
Metuchen	-0.137	0.001	0.000
Middlesex	-0.175	0.002	0.000
Milltown	-0.432	0.000	0.000
Monroe	1.395	0.000	0.000
New Brunswick	-1.602	0.072	0.000
North Brunswick	1.324	0.029	0.000
Old Bridge	0.868	0.000	0.000
Perth Amboy	0.474	0.000	0.000
Piscataway	0.923	0.020	0.000
Plainsboro	-0.456	0.000	0.070
Sayreville	3.842	0.536	0.000
South Amboy	0.176	-0.078	0.000
South Brunswick	5.592	0.000	0.000
South Plainfield	2.162	0.002	0.000
South River	0.128	0.003	0.000
Spotswood	0.127	0.000	0.000
Woodbridge	-0.542	0.000	0.000

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