



**NJ Department of Environmental Protection
Water Monitoring and Standards**



AMBIENT LAKES MONITORING NETWORK

Panel 1

Data and Results

Volume 2 of 2



September 2008

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NJ Department of Environmental Protection



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September 2008

AMBIENT LAKES MONITORING NETWORK

Panel 1

(Calendar Year 2005)

Volume 2 of 2

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Data and Results

NJDEP initiated, in 2005, a renewed ambient lake monitoring network designed to provide the water quality data necessary to assess the ecological health of the State's lentic water resource. This program involves the testing of randomly selected lakes from the state's approximately 1100 named lakes. The water quality measurements conducted at each lake include parameters such as dissolved oxygen, pH, nutrients, and chlorophyll a. Such testing will assist New Jersey in determining the status and trends in lake water quality, as needed to meet our Clean Water Act requirements and our Total Maximum Daily Load (TMDL)-related water quality assessment obligations.

Water Monitoring & Standards, Bureau of Freshwater & Biological Monitoring has worked to develop a monitoring program that would address both the deficiencies cited in the 1999 USEPA's Office of Inspector General's Audit Report, and the needs of the watershed management and water quality assessment (305(b)/303(d)) programs. This approach comports with the guidance provided in USEPA's publication, "Elements of a State Water Monitoring and Assessment Program," March 2003, which requires that states develop and implement long-term strategies which include monitoring of all state waterbody types, including lakes.

The lake monitoring network design is as follows:

1. **Target Population:** All lakes, man-made or natural, excepting water supply reservoirs, wholly or partially within the State of NJ political boundaries. A lake is defined as a permanent body of water of at least two hectares in surface, and a minimum depth of one meter. Lakes were selected randomly, using the USEPA - Generalized Random Tessellation Stratified (GRTS) survey design, but in a manner that equalizes selections over all Omernik level III ecoregions (6 within state). The New Jersey GIS coverage containing approximately 1,100 polygons of named lakes was used for the selection process.
2. **Network Stations:** The network consists of 200 lakes, each sampled once every five years, with forty lakes sampled per year. Depending on the lake size and characteristics, up to four sampling locations are monitored in each lake. Lakes not exhibiting temperature stratification are sampled at one meter below the surface, unless the lake is too shallow, in which case the sample is taken at mid-depth below the surface. Lakes exhibiting stratification are sampled above and below the thermocline. Depth to bottom is measured at each station .
3. **Sampling Frequency:** All lakes in the network will be sampled once every five years, with each lake being sampled at least three times during the year (Spring, Summer, and Fall).
4. **Monitoring Parameters:** Total Phosphorus, Total Kjeldahl Nitrogen, Total Nitrite+Nitrate Nitrogen, Ammonia Nitrogen, Dissolved Oxygen, Temperature, Specific Conductance, Alkalinity, Hardness, Secchi depths, and Chlorophyll are collected and analyzed at each station. Qualitative evaluations of algal blooms and aquatic vegetation are performed at each lake.

This Volume contains Panel 1 lakes raw data, observations, and trophic state assessments as described above.

Carlson Trophic State Index (TSI)

Carlson's Trophic State Index (TSI) is used as the basis for estimating the trophic state of New Jersey Lakes. Trophic states range from oligotrophic to hypereutrophic (and is viewed as a continuum) on this scale. Carlson's TSI is based on the interrelationships of Total Phosphorus (TP), chlorophyll "a", and Secchi transparency. Individual TSI values for each parameter are converted into common units using the following calculations.

Total Phosphorus TSI	$(TSIP) = 14.42 \ln(TP) + 4.15$
Chlorophyll "<u>a</u>" TSI	$(TSIC) = 9.81 \ln(\text{Chl } \underline{a}) + 30.6$
Secchi Disk TSI	$(TSIS) = 60 - 14.41 \ln(SD)$

Each lake may have up to three fixed stations per sampling event (season) where TSI parameters were collected. Using the above formulas, the result of each parameter was converted to TSI units. The three TSI values at each in-lake station were then averaged to obtain an overall TSI value for that station. Secchi disk measurements were not used in the calculation if the transparency was obscured by vegetation, or the lake was too shallow to give a representative measurement. An individual average TSI rating was calculated for each in-lake site and for each season.

Oligotrophic. TSI values range from 0 to 40.

Lakes have low nutrient levels, are usually deep, and have high oxygen levels in the bottom waters. These lakes have very few algal blooms.

Mesotrophic. TSI values range from 41-50.

Lakes are in the "middle" of the trophic scale. They have increasing amounts of nutrients and slightly lower amounts of dissolved oxygen. There are temporary algae and aquatic plant problems.

Eutrophic. TSI values range from 51-70.

Lakes are nutrient rich. They are usually shallow, "green" lakes that have limited oxygen levels in the bottom waters. They have persistent algae and aquatic plant problems.

Hypereutrophic. TSI range is >70.

Lakes are very green and have little or no oxygen in the bottom layers. There are extreme algae and aquatic plant problems.

AMBIENT LAKE MONITORING NETWORK

Lake Name Allentown Lake
Site ID NJW04459-231

County Monmouth
Municipality Allentown Borough



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	63.18	82.47	60	68.55 Eutrophic
Fall Station 1	73.05	75.42	69.99	72.82 Hypereutrophic

63.18 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Filamentous algae present

Fall

-Lake level slightly lower than summer.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Allentown Lake
SiteID: NJW04459-231

County: MONMOUTH
Municipality: ALLENTOWN BORO

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.4	0.9	1.0	26.11	7.72	95.4	7.14	0.204
outlet	0.6	0.6		26.68	7.11	88.9	7.2	0.203

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.3	0.9	0.5	23.27	8.61	100.5	7.47	0.235
outlet	0.8	0.5		24.29	7.15	85	7.32	0.235

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Allentown Lake

County: MONMOUTH

SiteID: NJW04459-231

Municipality: ALLENTOWN BORO

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	59.94	1.07	0.298	0.075	197.8	37	59.9	17.9
outlet	73.72	0.717	0.249	0.032	111.4	39	62.4	15.2

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	118.91	1.09	0.21	0.034	96.5	43	75.8	21.3
outlet	83.79	0.827	0.18	0.054	65.9	39	75.5	21.7

Sample Device - Horizontal Polycarbonate Sampler

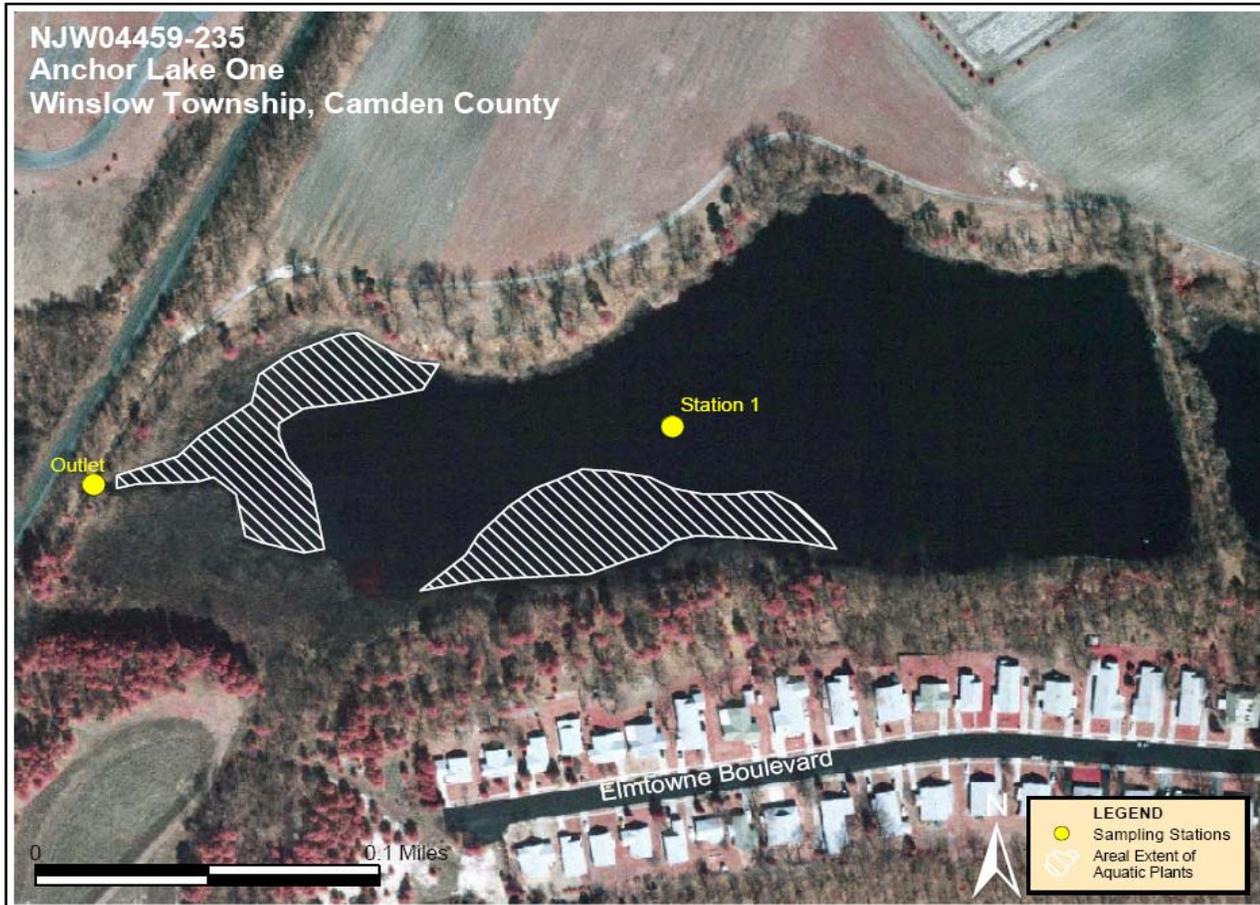
"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Anchor Lake One
Site ID NJW04459-235

County Camden
Municipality Winslow Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	59.47	59.83	63.22	60.84 Eutrophic
Fall Station 1	54.28	51.21	69.99	58.49 Eutrophic

Observations

Summer

-Submerged aquatic vegetation throughout. Duckweed. Surface algae.

Fall

-Lake level slightly lower than summer.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Anchor Lake One
SiteID: NJW04459-235

County: CAMDEN
Municipality: WINSLOW TWP

Surface to Bottom Profile

Season: Summer

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	0.8	0.5	0.8	25.22	6.18	74.6	6.01	0.095
outlet	0.6	0.3		27.34	5.5	69	6.13	0.094

Season: Fall

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	0.5	0.3	0.5	24.88	9.12	109.6	6.81	0.1
outlet	0.5	0.3		26.42	7.01	86.2	7.57	0.099

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Anchor Lake One

County: CAMDEN

SiteID: NJW04459-235

Municipality: WINSLOW TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	46.35	0.353	0.094	0.071	19.7	14	15.2	2.6
outlet	45.86	0.321	0.014	0.052	23.7	13	14.4	2.14

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	32.34	0.329	0.372	0.091	8.2	8	14.9	2.12
outlet	21.36	0.394	0.011	0.052	7.4	9	12.8	1.12

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Lake Ashroe
Site ID NJW04459-013

County Sussex
Municipality Sandyston Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.25	58.96	50.01	55.07 Eutrophic
Summer Station 2	47.46	60.67	50.01	57.72 Eutrophic
Fall Station 1	37.88	49.01	49.31	45.40 Mesotrophic
Fall Station 2	42.09	53.21	44.66	46.65 Mesotrophic

Observations

Summer

-Submerged aquatic vegetation.

Fall

-Snails observed.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Lake Ashroe

County: SUSSEX

SiteID: NJW04459-013

Municipality: SANDYSTON TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.2	0.9	2.0	25.1	7.22	87.2	7.49	0.061
2	3.4	0.9	2.0	24.55	6.23	73.6	7.33	0.078
2	3.4	1.8	2.0	24.2	6.5	76.3	7.28	0.078
2	3.4	2.7	2.0	24.03	5.63	63.4	7.09	0.078

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.1	0.9	2.1	8.12	9.03	78.1	6.4	0.051
1	2.1	1.8	2.1	8.1	8.97	77.5	6.41	0.051
2	3.5	0.9	2.9	8.93	8.31	73.2	6.35	0.051
2	3.5	1.8	2.9	8.91	8.29	73	6.34	0.051
2	3.5	2.7	2.9	8.87	8.33	73.2	6.35	0.051
outlet	0.2	0.2		8.93	9.62	84.8	6.59	0.051

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Lake Ashroe

County: SUSSEX

SiteID: NJW04459-013

Municipality: SANDYSTON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	37.08	0.312	<0.006	0.032	18.0	17	21.1	2.18
2	20.16	0.273	0.006	0.030	21.4	22	24.8	2.59

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	<10.37	0.199	<0.006	<0.004	6.5	12	18.2	0.84
2	13.89	0.268	<0.006	<0.004	10.0	7	17.6	1.25
outlet	12.69	0.265	<0.006	<0.006	10.1	13	18	1.04

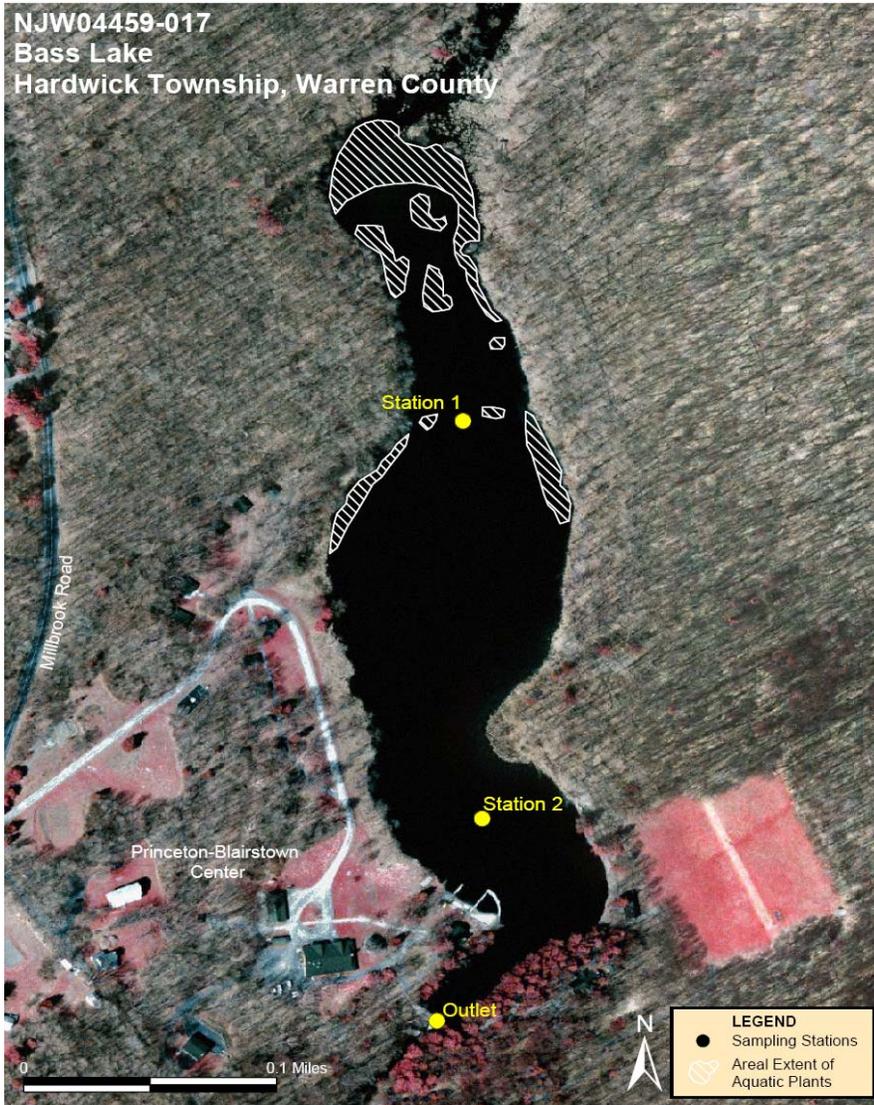
Sample Device - Horizontal Polycarbonate Sampler

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AMBIENT LAKE MONITORING NETWORK

Lake Name Bass Lake County Warren
 Site ID NJW04459-017 Municipality Hardwick Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	63.45	68.75	65.17	65.78 Eutrophic
Summer Station 2	65.58	70.16	63.22	66.32 Eutrophic
Fall Station 1	39.64	37.77	NA	38.71 Oligotrophic
Fall Station 2	41.91	41.87	46.23	43.34 Mesotrophic

63.45 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Lake herbicide treated on 8/16/05 (day before sampling). Lily pads. Ducks.

Fall

-Station 1 heavily silted.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Bass Lake

County: WARREN

SiteID: NJW04459-017

Municipality: HARDWICK TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.9	0.6	0.7	24.32	6.64	81.4	7.38	0.143
2	3.2	0.9	0.8	24.65	6.34	78.1	7.27	0.144
2	3.2	1.8	0.8	24.06	2.54	31	6.47	0.146
2	3.2	2.7	0.8	23.32	1.4	16.9	6.36	0.151
outlet	<0.2	<0.2		24.5	5.7	70.1	6.92	0.149

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.7	0.5	0.7	11.59	8.32	78.2	6.52	0.094
2	2.8	0.9	2.6	13.21	7.76	75.7	6.29	0.089
2	2.8	1.8	2.6	12.95	7.75	75.2	6.37	0.089
outlet	0.3	0.3		12.74	8.71	84.1	6.43	0.091

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

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AMBIENT LAKE MONITORING NETWORK

Lake Name: Bass Lake

County: WARREN

SiteID: NJW04459-017

Municipality: HARDWICK TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	61.09	0.415	0.006	0.023	48.9	36	45.7	7.23
2	70.8	0.562	<0.006	0.024	56.4	38	47.5	6.91
outlet	51.86	0.483	0.009	0.062	37.4	36	46.8	5.08

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	11.72	0.276	0.056	0.02	2.1	4	26.6	1.63
2	13.72	0.246	0.074	0.028	3.2	13	25.4	1.27
outlet	17.29	0.289	0.071	0.036	2.7	11	24.8	2.61

Sample Device - Horizontal Polycarbonate Sampler

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-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Braddocks Mill Pond
Site ID NJW04459-230

County Burlington
Municipality Medford Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer				54.06
Summer Station 1	56.76	51.35	NA	Eutrophic
Summer Station 2	56.76	54.03	52.35	Eutrophic
Summer Station 3	56.76	54.51	54.16	Eutrophic
Fall				40.96
Fall Station 1	37.88	44.04	NA	Mesotrophic
Fall Station 2	37.88	46.22	49.31	Mesotrophic
Fall Station 3	37.88	48.75	49.31	Mesotrophic

Observations

Summer

-No significant observations.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Braddocks Millpond
SiteID: NJW04459-230

County: BURLINGTON
Municipality: MEDFORD TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.1	0.9	1.1	26.23	8.45	103.9	6.37	0.079
2	2.3	0.9	1.7	26.13	7.47	91.7	6.03	0.083
2	2.3	1.8	1.7	23.73	0.64	8.2	5.26	0.092
3	3.0	0.9	1.5	26.39	7.6	93.8	5.92	0.082
3	3.0	1.8	1.5	23.85	0.34	4	5.07	0.088
3	3.0	2.7	1.5	18.32	0.09	0.9	6.29	0.143
outlet	0.3	0.3		28.27	7.95	101.4	6.16	0.083

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.9	0.8	0.9	23.8	7.43	87.8	5.95	0.078
2	2.3	0.9	2.1	23.82	8.02	94.7	6.04	0.081
2	2.3	1.8	2.1	22.96	7.7	89.4	5.76	0.08
3	2.8	0.9	2.1	23.92	8.02	94.8	6.1	0.081
3	2.8	1.8	2.1	22.94	7.37	85.6	5.73	0.08
3	2.8	2.7	2.1	21.41	0.88	9.9	5.51	0.088
outlet	0.3	0.2		23.91	7.77	91.9	6.08	0.082

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Braddocks Millpond

County: BURLINGTON

SiteID: NJW04459-230

Municipality: MEDFORD TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.302	0.183	0.031	8.3	7	12.3	2.07
2	< 38.41	0.356	0.217	0.032	10.9	7	12.3	2.29
3	< 38.41	0.318	0.24	0.031	11.4	7	12.4	2.23
outlet	< 38.41	0.285	0.246	0.035	9.8	8	12.6	2.21

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	<10.37	0.331	0.309	0.033	3.9	6	12	0.96
2	<10.37	0.268	0.273	0.028	4.9	7	12.2	1.25
3	<10.37	0.309	0.258	0.028	6.4	6	12.1	1.14
outlet	<10.37	0.29	0.255	0.032	5.7	8	12.5	1.98

Sample Device - Horizontal Polycarbonate Sampler

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AMBIENT LAKE MONITORING NETWORK

Lake Name Brainerd Lake **County** Middlesex
Site ID NJW04459-033 **Municipality** Cranbury Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	70.84	54.9	77.35	67.70 Eutrophic
Summer Station 2	67.1	56.28	77.35	66.91 Eutrophic
Fall Station 1	58.63	62.99	67.36	63.00 Eutrophic
Fall Station 2	57.61	65.9	65.14	62.88 Eutrophic

70.84 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Lake Cloudy and turbid. Water level elevated due to rain 48 hours prior to sampling.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Brainerd Lake
SiteID: NJW04459-033

County: MIDDLESEX
Municipality: CRANBURY TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.5	0.9	0.3	24.75	0.14	1.7	6.65	0.163
2	1.7	0.9	0.3	24.84	4.08	48.9	6.07	0.152
outlet	0.6	0.6		25.26	4.79	58.1	5.98	0.137

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.2	0.9	0.6	24.68	5.67	69.1	6.33	0.236
2	1.7	0.9	0.7	25.96	8.01	100	6.69	0.224
outlet	0.6	0.3		25.78	5.97	74.2	6.42	0.225

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Brainerd Lake

County: MIDDLESEX

SiteID: NJW04459-033

Municipality: CRANBURY TWP

Lake Profile Raw Data

Season: Summer

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	102.02	0.916	0.588	0.173	11.9	15	30.3	42
2	78.71	0.929	0.526	0.078	13.7	16	28	36.2
outlet	89.83	0.966	0.475	0.122	18.6	16	25.3	36.7

Season: Fall

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	43.74	0.743	0.6	0.102	27.2	25	51.2	9.84
2	40.74	0.811	0.661	0.114	36.6	23	50.9	9.79
outlet	33.24	0.865	0.587	0.207	42.3	25	50.7	7.66

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Burnt Mill Pond
 Site ID NJW04459-014

County Cumberland
 Municipality Vineland City



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	65.97	58.63	60.45 Eutrophic
Fall Station 1	37.88	42.12	58.63	46.21 Mesotrophic

Observations

Summer

-Submerged aquatic vegetation throughout. Filamentous algae. Duckweed. Lily pads. Fish.

Fall

-Submerged aquatic vegetation throughout. Filamentous algae.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Burnt Mill Pond
SiteID: NJW04459-014

County: CUMBERLAND
Municipality: VINELAND CITY

Surface to Bottom Profile

Season: Summer

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	1.1	0.9	1.1	25.56	12.25	149.3	6.93	0.148
outlet	0.5	0.5		29.41	9.39	122.7	8.44	0.159

Season: Fall

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	1.1	0.9	1.1	22.51	8.64	98.6	6.97	0.158
outlet	0.8	0.5		23.9	9.2	107.7	9.02	0.16

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Burnt Mill Pond
SiteID: NJW04459-014

County: CUMBERLAND
Municipality: VINELAND CITY

Lake Profile Raw Data

Season: Summer

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	< 38.41	0.352	4.71	0.029	36.8	15	42	2.27
outlet	< 38.41	0.398	3.87	0.043	4.5	20	39.6	0.93

Season: Fall

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	<10.37	0.24	4.54	0.028	3.2	18	37.7	0.71
outlet	21.19	0.206	3.94	0.03	2.2	17	36.7	0.42

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Butler Pond **County** Essex
Site ID NJW04459-037 **Municipality** Livingston Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	74.95	65.72	83.19	74.62 Hypereutrophic
Fall Station 1	67.69	64.75	83.19	71.88 Hypereutrophic

74.95 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Lily pads.

Fall

-Heavy rain during two weeks prior to sampling. Fish observed.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Butler Pond

County: ESSEX

SiteID: NJW04459-037

Municipality: LIVINGSTON TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.4	0.3	0.2	21.71	4.55	51.3	7.26	0.496

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.9	0.6	0.2	9.15	9.1	80.1	7.09	0.184
outlet	0.2	0.2		9.09	10.21	89.7	7.23	0.19

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Butler Pond

County: ESSEX

SiteID: NJW04459-037

Municipality: LIVINGSTON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	135.65	1.51	0.023	0.184	35.9	124	120.6	177

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	81.99	0.836	0.263	<0.004	32.5	47	65.6	43.7
outlet	78.81	0.867	0.27	<0.004	33.4	44	66.8	46.7

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Cedarville Block, Sand & Gravel Co. Pond **County** Cumberland
Site ID NJW04459-025 **Municipality** Lawrence Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	56.64	50.75	54.72 Eutrophic
Summer Station 2	56.76	56.75	49.31	54.27 Eutrophic
Fall Station 1	57.86	56.9	61.52	58.76 Eutrophic
Fall Station 2	49.64	57.3	57.37	54.77 Eutrophic

Observations

Summer

- Many geese. Blue heron. Lake previously used to rear hybrid striped bass.
- Lake water used for irrigation of surrounding farms.

Fall

- No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Cedarville Block Sand & Gravel Company Pond **County:** CUMBERLAND
SiteID: NJW04459-025 **Municipality:** LAWRENCE TWP

Surface to Bottom Profile

Season: *Summer*

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	4.7	0.9	1.9	29.89	9.4	124	8.88	0.27
1	4.7	1.8	1.9	29.64	9.65	126.5	8.93	0.27
1	4.7	2.7	1.9	28.78	9.97	128.7	8.76	0.269
1	4.7	3.6	1.9	28.13	9.86	125.9	8.2	0.271
1	4.7	4.6	1.9	25.64	2.32	28.3	6.46	0.29
2	4.9	0.9	2.1	29.86	9.26	121.9	8.94	0.27
2	4.9	1.8	2.1	29.67	9.51	124.7	8.95	0.27
2	4.9	2.7	2.1	28.9	10.94	141.5	9.04	0.268
2	4.9	3.6	2.1	27.89	12.52	159.2	8.26	0.27
2	4.9	4.6	2.1	24.97	6.37	77.6	6.45	0.272

Season: *Fall*

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	4.4	0.9	0.9	23.79	4.58	53.9	7.05	0.274
1	4.4	1.8	0.9	23.79	4.39	51.7	7.05	0.273
1	4.4	2.7	0.9	23.78	4.46	52.5	7.08	0.274
1	4.4	3.6	0.9	23.76	4.3	50.7	7.03	0.275
2	4.4	0.9	1.2	23.84	5.08	60	7.16	0.275
2	4.4	1.8	1.2	23.84	5.03	59.3	7.16	0.275
2	4.4	2.7	1.2	23.81	4.96	58.4	7.17	0.275
2	4.4	3.6	1.2	23.79	5	58.9	7.2	0.274

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Cedarville Block Sand & Gravel Company Pond **County:** CUMBERLAND
SiteID: NJW04459-025 **Municipality:** LAWRENCE TWP

Lake Profile Raw Data

Season: Summer

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	< 38.41	0.382	3.15	0.03	14.2	48	102.3	3.82
2	< 38.41	0.428	3.3	0.029	14.4	45	104.1	3.09

Season: Fall

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	41.45	0.957	1.94	0.466	14.6	62	109.6	8.07
2	23.44	0.848	1.98	0.4	15.2	65	109.1	6.18

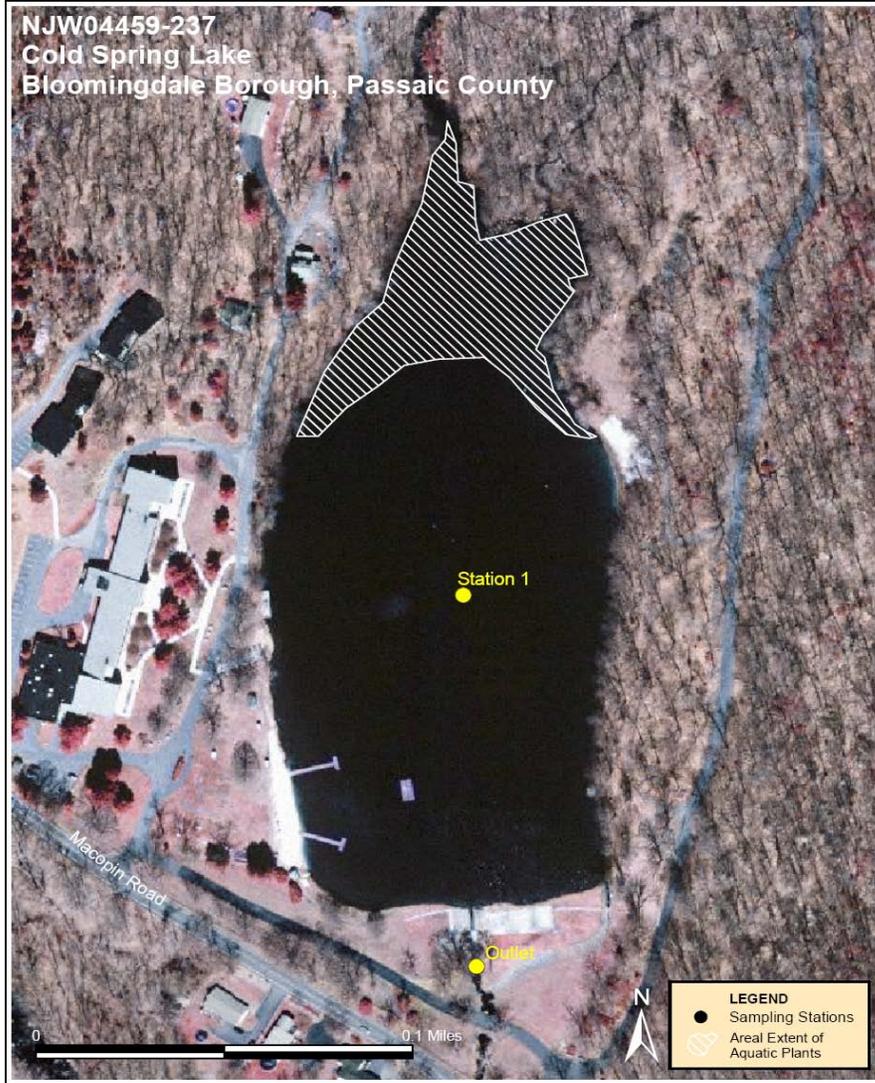
Sample Device - Horizontal Polycarbonate Sampler

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-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Cold Spring Lake **County** Passaic
Site ID NJW04459-237 **Municipality** Bloomingdale Borough



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	50.25	48	51.67 Eutrophic
Fall Station 1	39.01	46.16	46.23	43.80 Mesotrophic

Observations

Summer

- Lily pads. Submerged aquatic vegetation. Geese. Freshwater jelly fish.

Fall

- Freshwater jelly fish.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Cold Spring Lake
SiteID: NJW04459-237

County: PASSAIC
Municipality: BLOOMINGDALE BORO

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.6	0.9	2.3	28.08	6.24	81.6	7.15	0.157
1	2.6	1.8	2.3	27.76	6	78.2	7.08	0.157
outlet	<0.2	<0.2	1.0	18.18	1.34	14.6	6.43	0.173

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.6	0.9	2.6	21.57	6.36	73.4	6.86	0.164
1	2.6	1.8	2.6	20.62	6.25	70.9	6.83	0.164
outlet	<0.2	<0.2		16.84	0.9	9.4	6.38	0.192

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Cold Spring Lake
SiteID: NJW04459-237

County: PASSAIC
Municipality: BLOOMINGDALE BORO

Lake Profile Raw Data

Season: Summer

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	< 38.41	0.159	<0.006	0.022	7.4	19	25.8	1.2
outlet	< 38.41	0.137	0.359	0.105	0.1	42	44	1.77

Season: Fall

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	11.22	0.296	0.007	0.039	4.9	17	27.4	1.14
outlet	<10.37	0.273	0.277	0.197	0.0	45	50.6	3.81

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Davis Mill Pond **County** Cumberland
Site ID NJW04459-006 **Municipality** Stow Creek Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	60.73	73.15	67.36	67.08 Eutrophic
Summer Station 2	59.36	74.29	69.99	67.88 Eutrophic
Summer Station 3	56.76	71.69	69.99	66.15 Eutrophic
Fall Station 1	68.25	71.63	73.2	71.03 Hypereutrophic
Fall Station 2	69.3	72.15	73.2	71.55 Hypereutrophic
Fall Station 3	65.73	72.45	69.99	69.39 Eutrophic

68.25 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Geese. Duckweed. Fish.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Davis Mill pond
SiteID: NJW04459-006

County: CUMBERLAND
Municipality: STOW CREEK TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.6	0.9	0.6	29.03	7.75	100.6	6.91	0.139
2	2.6	0.9	0.5	29.19	9.76	127.1	8.59	0.138
2	2.6	1.8	0.5	28.3	3.19	40.9	6.59	0.141
3	2.2	0.9	0.5	29.43	9.41	123.1	8.43	0.139
3	2.2	1.8	0.5	28.7	4.6	59.3	6.71	0.141
outlet	0.5	0.3		28.41	5.8	74.4	6.95	0.17

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.5	0.9	0.4	23.55	6.5	75.6	6.84	0.144
2	2.6	0.9	0.4	24.26	7.76	91.6	7.39	0.143
2	2.6	1.8	0.4	24.11	6.63	78.2	6.98	0.144
3	2.2	0.9	0.5	24.04	7.27	85.3	7.03	0.143
3	2.2	1.8	0.5	23.98	6.85	80.4	6.91	0.144
outlet	0.6	0.3		23.77	6.23	72.8	6.8	0.232

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Davis Mill pond

County: CUMBERLAND

SiteID: NJW04459-006

Municipality: STOW CREEK TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	50.6	0.842	0.026	0.022	76.5	25	50.2	17.9
2	46	0.828	0.01	0.025	86.0	25	48.5	10.6
3	< 38.41	0.734	0.064	0.016	66.0	24	48.7	10.8
outlet	< 38.41	0.887	0.044	0.045	90.9	26	51.1	16

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	85.19	0.839	0.006	0.034	65.5	24	51.8	12.6
2	91.64	0.811	<0.006	0.029	69.1	26	51.7	12.7
3	71.55	0.8	<0.006	0.022	71.3	25	51.6	14
outlet	87.83	1.18	0.025	0.064	64.9	30	59.6	15.1

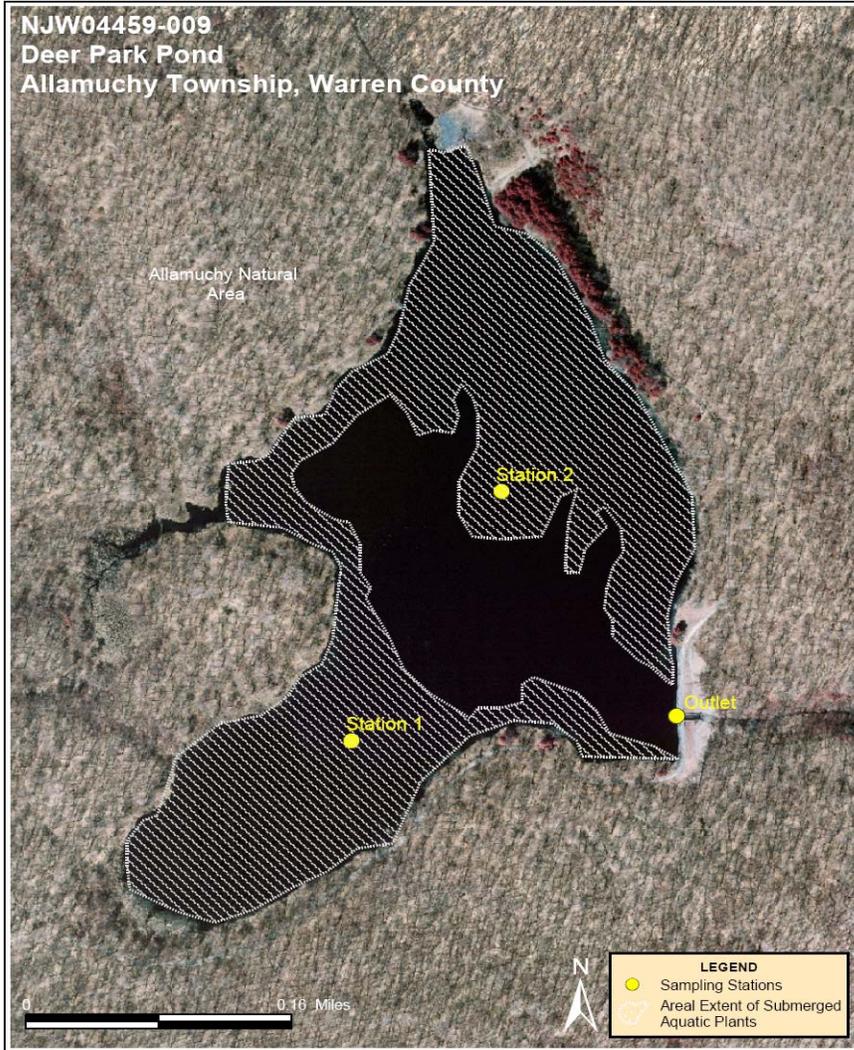
Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Deer Park Pond **County** Warren
Site ID NJW04459-009 **Municipality** Allamuchy Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	51.18	NA	53.97 Eutrophic
Summer Station 2	56.76	50.36	54.16	59.60 Eutrophic
Fall Station 1	39.51	50.67	51.53	47.24 Mesotrophic
Fall Station 2	42.42	51.17	49.31	47.63 Mesotrophic

Observations

Summer

-Secchi reading obscured by plants at Station 1. Ducks. Beaver dam.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Deer Park Pond
SiteID: NJW04459-009

County: WARREN
Municipality: ALLAMUCHY TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.3	0.9	0.9	25.37	3.61	45.1	6.41	0.088
2	2.1	0.9	1.5	26.21	6.22	78.9	7.35	0.087
2	2.1	1.8	1.5	25.73	3.48	44.3	6.55	0.091

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.8	0.9	1.8	13.47	6.92	68.6	6.54	0.076
1	1.8	1.8	1.8	13.14	4.46	43.9	6.47	0.078
2	2.4	0.9	2.1	14.01	7.13	71.5	6.71	0.076
2	2.4	1.8	2.1	13.67	6.92	68.9	6.68	0.076
outlet	<0.2	<0.2		14.74	8.47	86.3	7.12	0.077

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Deer Park Pond

County: WARREN

SiteID: NJW04459-009

Municipality: ALLAMUCHY TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.468	0.007	0.032	8.1	39	42.1	1.07
2	<38.41	0.634	0.006	0.025	44.7	38	42.3	3.99

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	11.61	0.436	<0.006	0.018	7.7	26	37.3	0.67
2	14.21	0.44	0.011	0.038	8.1	25	35.7	0.68
outlet	<10.37	0.512	0.006	0.021	4.6	25	37.1	0.56

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Eastern Gate Lake **County** Gloucester
Site ID NJW04459-236 **Municipality** Franklin Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	51.16	53.23	53.71 Eutrophic
Fall Station 1	37.88	50.05	44.66	44.19 Mesotrophic

Observations

Summer

-No significant observations.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Eastern Gate Lake
SiteID: NJW04459-236

County: GLOUCESTER
Municipality: FRANKLIN TWP

Surface to Bottom Profile

Season: Summer

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	5.0	0.9	1.6	29.4	9.19	120.2	8.64	0.166
1	5.0	1.8	1.6	29.02	9.26	120.3	8.68	0.165
1	5.0	2.7	1.6	28.85	9.26	120	8.68	0.165
1	5.0	3.6	1.6	28.23	6.95	89.1	7.67	0.167
1	5.0	4.6	1.6	24.46	3.81	45.6	7.36	0.192

Season: Fall

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	4.9	0.9	2.9	23.48	6.26	73.8	7.46	0.191
1	4.9	1.8	2.9	23.48	6.05	71.3	7.49	0.192
1	4.9	2.7	2.9	23.47	6	70.7	7.48	0.191
1	4.9	3.6	2.9	23.47	6.01	70.8	7.48	0.191
1	4.9	4.6	2.9	23.44	5.96	70.1	7.46	0.192

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Eastern Gate Lake

County: GLOUCESTER

SiteID: NJW04459-236

Municipality: FRANKLIN TWP

Lake Profile Raw Data

Season: Summer

<i>Station</i>	<i>Tot Phos</i> (ug/L)	<i>TKN</i> (mg/L)	<i>Nitrite-Nitrate</i> (mg/L)	<i>Ammonia-N</i> (mg/L)	<i>Chl a</i> (ug/L)	<i>Alk</i> (ppm)	<i>Hard</i> (ppm)	<i>Turbidity</i> (NTU)
1	< 38.41	0.309	0.146	0.028	8.1	53	58	1.09

Season: Fall

<i>Station</i>	<i>Tot Phos</i> (ug/L)	<i>TKN</i> (mg/L)	<i>Nitrite-Nitrate</i> (mg/L)	<i>Ammonia-N</i> (mg/L)	<i>Chl a</i> (ug/L)	<i>Alk</i> (ppm)	<i>Hard</i> (ppm)	<i>Turbidity</i> (NTU)
1	<10.37	0.304	0.104	0.079	7.3	59	65.4	1.75

Sample Device - Horizontal Polycarbonate Sampler

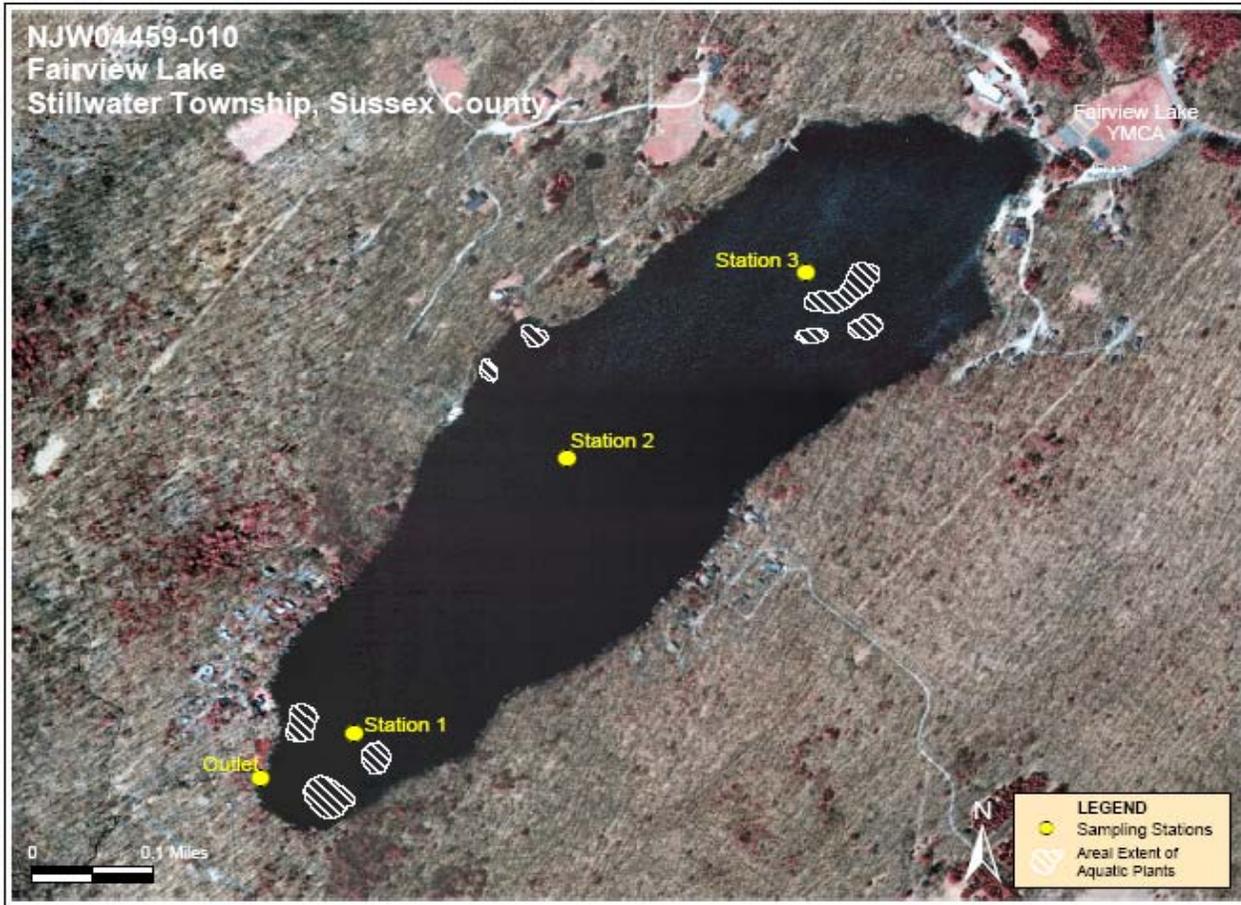
"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Fairview Lake
Site ID NJW04459-010

County Sussex
Municipality Stillwater Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	46.49	62.55	54.16	54.40 Eutrophic
Summer Station 2	53.57	63.72	57.37	58.22 Eutrophic
Summer Station 3	49.9	68.71	58.63	59.08 Eutrophic
Fall Station 1	54.06	64.79	55.15	58.00 Eutrophic
Fall Station 2	63.72	64.46	56.22	61.47 Eutrophic
Fall Station 3	53.73	64.54	NA	59.14 Eutrophic

63.72 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Filamentous algae. Heron.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Fairview Lake
SiteID: NJW04459-010

County: SUSSEX
Municipality: STILLWATER TWP

Surface to Bottom Profile

Season: *Summer*

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	3.5	0.9	1.5	25.32	6.87	86.1	7.92	0.059
1	3.5	1.8	1.5	25.14	6.8	85	7.9	0.058
1	3.5	2.7	1.5	25.07	6.71	83.9	7.68	0.06
2	5.5	0.9	1.2	25.04	6.76	84.3	7.76	0.059
2	5.5	1.8	1.2	24.92	6.62	82.4	7.48	0.06
2	5.5	2.7	1.2	24.85	6.4	79.5	7.19	0.059
2	5.5	3.6	1.2	24.6	3.47	43	6.24	0.06
2	5.5	4.6	1.2	23.73	0.06	0.7	6.09	0.066
2	5.5	5.4	1.2	18.75	0.02	0.2	6.48	0.176
3	4.5	0.9	1.1	24.92	6.7	83.4	7.59	0.059
3	4.5	1.8	1.1	24.8	6.5	80.8	7.31	0.059
3	4.5	2.7	1.1	24.66	6.47	80.2	7.29	0.059
3	4.5	3.6	1.1	24.43	6.19	76.4	6.98	0.06
outlet	0.2	0.2		25.48	6.22	78.3	6.68	0.059

Season: *Fall*

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	3.81	0.9	1.4	14.82	8.44	86.6	6.97	0.06
1	3.81	1.8	1.4	14.82	8.31	85.5	7	0.06
1	3.81	2.7	1.4	14.76	8.25	84.6	6.97	0.06
1	3.81	3.6	1.4	14.7	8.08	82.7	6.89	0.061
2	5.7	0.9	1.3	15.06	8.26	85.1	7.01	0.06
2	5.7	1.8	1.3	14.85	8.1	83.2	6.94	0.061
2	5.7	2.7	1.3	14.81	8.02	82.3	6.9	0.06
2	5.7	3.6	1.3	14.8	8.03	82.4	6.92	0.06
2	5.7	4.6	1.3	14.76	8.04	82.5	6.9	0.06
2	5.7	5.4	1.3	14.75	8.05	82.6	6.88	0.06
3	4.6	0.9		14.85	8.38	86.1	7.04	0.06
3	4.6	1.8		14.57	8.16	83.3	6.93	0.06
3	4.6	2.7		14.54	8.2	83.7	6.93	0.061
3	4.6	3.6		14.36	8.27	84.1	6.94	0.06
outlet	0.2	0.2		14.74	8.82	90.4	6.86	0.06

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Fairview Lake

County: SUSSEX

SiteID: NJW04459-010

Municipality: STILLWATER TWP

Lake Profile Raw Data

Season: Summer

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	18.84	0.177	<0.006	0.032	26.0	16	20.6	2.08
2	30.79	0.175	<0.006	0.03	29.2	16	20.4	1.99
3	23.87	0.165	<0.006	0.03	48.7	15	20.3	3.04
outlet	10.65	0.152	0.01	0.047	12.9	15	20	1.48

Season: Fall

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	31.85	0.733	0.06	0.355	32.6	17	20	3.16
2	62.23	0.769	0.055	0.368	31.6	17	20.4	2.86
3	31.14	0.737	0.057	0.356	31.8	19	20.6	3.04
outlet	20.03	0.685	0.072	0.342	30.1	17	20.5	3.4

Sample Device - Horizontal Polycarbonate Sampler

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-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Fawn Lake
Site ID NJW04459-224

County Ocean
Municipality Stafford Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	56.1	61.52	58.13 Eutrophic
Summer Station 2	56.76	62.36	61.52	60.21 Eutrophic
Fall Station 1	50.5	51.8	NA	51.15 Eutrophic
Fall Station 2	42.38	41.77	NA	42.08 Mesotrophic

Observations

Summer

-Cedar brown water.

Fall

-Cedar brown water. Fish. Frogs. Kingfisher.
 Secchi transparency reaches bottom of lake.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Fawn Lake

County: OCEAN

SiteID: NJW04459-224

Municipality: STAFFORD TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.2	0.9	0.9	26.33	6.72		6.37	0.141
2	1.7	0.9	0.9	26.89	5.96		6.6	0.142
outlet	0.2	0.2		28.53	6.61		7.44	0.06

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.9	0.6	0.9	20.21	8.5	92.1	6.73	0.177
2	1.1	0.9	1.1	19.97	7.97	86	6.68	0.177

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Fawn Lake

County: OCEAN

SiteID: NJW04459-224

Municipality: STAFFORD TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.299	<0.006	0.019	13.5	12	13.2	17.1
2	< 38.41	0.389	<0.006	0.024	25.5	12	13.1	8.53
outlet	< 38.41	0.462	<0.006	0.026	19.3	12	13	4.37

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	24.89	0.666	<0.006	0.08	8.7	13	14.8	5.02
2	14.17	0.577	<0.006	0.084	3.1	12	14.5	2.92

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Gilman Lake
 Site ID NJW04459-005

County Gloucester
 Municipality Harrison Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	43.48	NA	50.12 Eutrophic
Summer Station 2	56.76	54.25	NA	55.50 Eutrophic
Summer Station 3	56.76	55.16	NA	55.96 Eutrophic
Fall Station 1	37.88	36.42	NA	37.15 Oligotrophic
Fall Station 2	37.88	39.8	NA	38.84 Oligotrophic
Fall Station 3	37.88	38.26	NA	38.07 Oligotrophic

Observations

Summer

- Submerged aquatic vegetation throughout.
- Informed by Gilman Lake Association that Petroleum Hydrocarbons (possibly oil or diesel) were detected in samples collected by Association.

Fall

- No significant observations.

*Secchi transparency reaches bottom of lake.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Gilman Lake
SiteID: NJW04459-005

County: GLOUCESTER
Municipality: HARRISON TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.2	0.9	1.2	23.54	7.7	90.6	7.53	0.166
2	1.3	0.9	1.3	26.57	7.64	95.2	7.61	0.14
3	2.0	0.9	1.8	25.57	9.33	114	7.81	0.156
3	2.0	1.8	1.8	23.66	10.09	120.7	7.68	0.144
outlet	0.2	0.2		30.64	6.45	86.3	8.06	0.152

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.2	0.9	1.2	20.71	6.75	75.2	6.07	0.171
2	1.3	0.9	1.3	20.01	6.42	70.3	6.03	0.157
3	2.2	0.9	2.2	22.22	8.18	93.5	6.28	0.161
3	2.2	1.8	2.2	22.17	8.22	94	6.32	0.161
outlet	<0.2	<0.2		22.65	7.93	91.5	6.48	0.163

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Gilman Lake

County: GLOUCESTER

SiteID: NJW04459-005

Municipality: HARRISON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.361	2.66	0.037	3.7	8	48.2	0.91
2	< 38.41	0.307	2.32	0.039	11.1	12	46.2	1.65
3	< 38.41	0.3	2.47	0.026	12.2	12	48.2	1.57
outlet	< 38.41	0.302	2.17	0.028	20.0	14	47.1	1.46

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	<10.37	0.281	2.4	0.064	1.8	11	49.7	1.24
2	<10.37	0.283	2.09	0.063	2.6	13	48.1	1.21
3	<10.37	0.265	2.08	0.059	2.2	12	48.4	1.12
outlet	<10.37	0.275	2.11	0.059	2.4	11	48.2	0.9

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Highland Lake **County** Sussex
Site ID NJW04459-022 **Municipality** Vernon Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	56.56	51.53	58.28 Eutrophic
Fall Station 1	67.12	68.89	63.22	66.41 Eutrophic

67.12 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Lake treated with SONAR herbicide on 5/12/05.

Fall

-Lake has golden/ mustard colored tint. Aeration units in lake operating.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Highland Lake

County: SUSSEX

SiteID: NJW04459-022

Municipality: VERNON TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.5	0.9	0.9	26.09	1.5	18.8	7.1	0.389
1	2.5	1.8	0.9	25.61	1	12.4	7.13	0.389

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.4	0.9	0.8	19.07	9	97.9	8.47	0.407
1	2.4	1.8	0.8	17.51	5.39	56.7	7.52	0.41

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Highland Lake

County: SUSSEX

SiteID: NJW04459-022

Municipality: VERNON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.76	0.009	0.252	14.1	89	105.1	5.92

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	78.82	1.05	<0.006	0.076	49.6	92	111.6	

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Hubers Lake **County** Bergen
Site ID NJW04459-001 **Municipality** Oakland Borough



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	66.43	73.19	57.37	65.66 Eutrophic
Summer Station 2	72.29	61.56	53.23	62.36 Eutrophic
Fall Station 1	75.27	34.26	60	56.51 Eutrophic
Fall Station 2	44.2	29.66	NA	36.93 Oligotrophic

 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Geese. Duckweed. Decomposing leaves.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Hubers Lake
SiteID: NJW04459-001

County: BERGEN
Municipality: OAKLAND BORO

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.4	0.9	1.2	24.53	3.14	38	7.15	0.561
2	3.2	0.9	1.6	24.58	1.99	24.2	7.08	0.561
2	3.2	1.8	1.6	24.14	3.43	41.2	7.17	0.565
2	3.2	2.7	1.6	20.35	0.06	0.7	6.57	0.872
outlet	0.8	0.5		22.57	4.9	57.2	7.11	0.624

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.1	0.9	1.0	13.84	7.18	67.9	6.98	0.417
2	3.1	0.9		13.93	6.68	64.1	6.95	0.402
2	3.1	1.8		13.87	6.13	60.5	6.89	0.403
2	3.1	2.7		13.81	5.87	56	6.82	0.447
outlet	0.6	0.3		14.14	9.02	89	7.09	0.405

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Hubers Lake

County: BERGEN

SiteID: NJW04459-001

Municipality: OAKLAND BORO

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	75.1	0.936	0.082	0.168	76.8	105	144.7	5.39
2	112.81	0.773	0.078	0.212	23.5	101	144.7	3.4
outlet	84.56	0.771	0.076	0.215	16.2	99	144.4	2.81

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	138.63	1.06	3.4	0.161	1.5	61	110.2	3.22
2	16.08	0.714	3.42	0.167	0.9	58	104.8	2.07
outlet	46.69	0.694	3.44	0.167	0.8	59	104.4	2.21

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Indian Lake **County** Morris
Site ID NJW04459-031 **Municipality** Denville Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	57.17	60	57.98 Eutrophic
Summer Station 2	56.76	56.75	58.63	57.38 Eutrophic
Summer Station 3	56.76	60.47	NA	58.62 Eutrophic
Fall Station 1	37.88	40.92	NA	39.40 Oligotrophic
Fall Station 2	37.88	41.7	NA	39.79 Oligotrophic
Fall Station 3	47.57	49.55	NA	48.56 Mesotrophic

Observations

Summer

-Filamentous algae. Ducks. Geese. Swans. Snails.
 Secchi transparency reaches bottom of lake at Station 3.

Fall

-Thick mat of algae on lake bottom.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Indian Lake

County: MORRIS

SiteID: NJW04459-031

Municipality: DENVILLE TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.8	0.9	1.0	29.66	6.12	81.7	8.54	0.328
2	1.4	0.9	1.1	29.06	6.24	82.5	8.67	0.325
3	1.0	0.9	1.0	29.08	5.07	67	8.37	0.324
outlet	0.3	0.3		28.63	4.86	63.8	7.35	0.322

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.8	0.9	1.8	19.78			8.44	0.327
1	1.8	1.5	1.8	19.76			8.57	0.327
2	1.4	0.9	1.4	20.12			8.86	0.324
3	1.0	0.6	1.0	20.53			8.08	0.326
outlet	0.2	0.2		21.02			7.72	0.332

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Indian Lake

County: MORRIS

SiteID: NJW04459-031

Municipality: DENVILLE TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.402	<0.006	0.037	15.0	38	72.5	4.59
2	< 38.41	0.358	<0.006	0.023	14.4	39	74.3	4.68
3	< 38.41	0.467	<0.006	0.023	21.0	42	76.7	5.52
outlet	44.89	0.448	<0.006	0.025	16.4	40	72.4	4.02

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	<10.37	0.475	<0.006	0.062	2.9	41	81	1.31
2	<10.37	0.508	<0.006	0.071	3.1	44	82.5	1.63
3	20.31	0.506	<0.006	0.08	6.9	45	83.5	2.51
outlet	24.96	0.508	<0.006	0.075	7.7	40	80	2.84

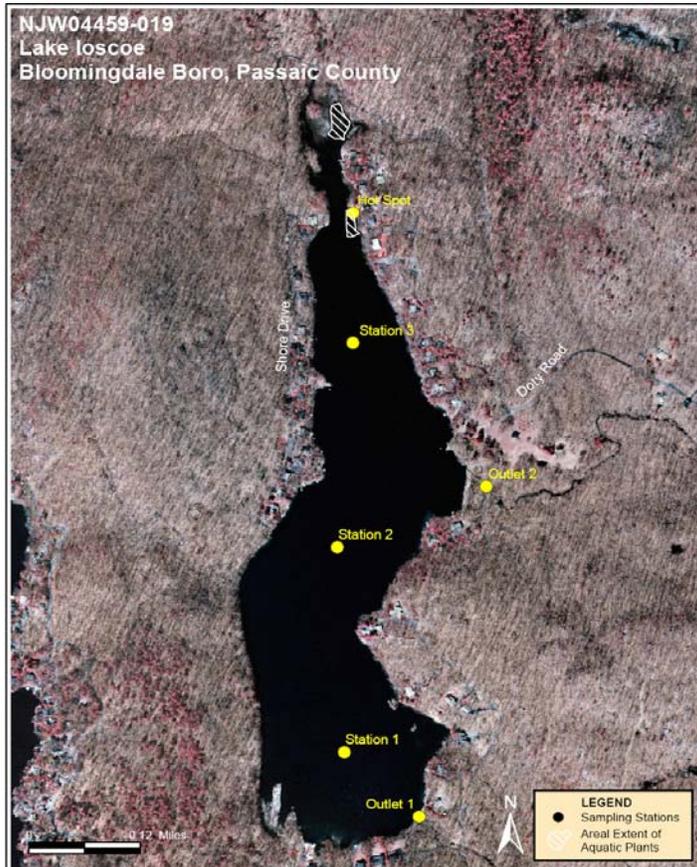
Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Lake loscoe **County** Passaic
Site ID NJW04459-019 **Municipality** Bloomingdale Boro



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	65.14	58.63	60.18 Eutrophic
Summer Station 2	56.76	66.93	58.63	60.77 Eutrophic
Summer Station 3	56.76	67.93	60	61.56 Eutrophic
Summer "Hot Spot"*	56.76	not sampled	65.14	60.95 Eutrophic
Fall Station 1	53.05	64.69	54.16	57.30 Eutrophic
Fall Station 2	60.21	65.8	52.35	59.46 Eutrophic
Fall Station 3	56.54	65.32	52.35	58.07 Eutrophic
Fall "Hot Spot"*	59.84	65.39	NA	62.62 Eutrophic

Observations

Summer

-Lake treated with copper sulfate on 7/27/05. Filamentous algae abundant at "hot spot"

Fall

-Lake unusually high due to release of water from Glen Wild Lake upstream.

-"hot spot" total depth, 0.7 m, too shallow for accurate Secchi measurement.

*A "hot spot" is defined as a small area of the lake which has unusual characteristics as compared to the rest of the lake. These characteristics include dense algae growth and unusual odor or color, that can indicate contamination which may be tracked to a source. See following data sheet for actual results.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Lake Ioscoe

County: PASSAIC

SiteID: NJW04459-019

Municipality: BLOOMINGDALE BORO

Surface to Bottom Profile

Season: *Summer*

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	2.5	0.9	1.1	28.06	8.02	103.3	8.39	0.137
1	2.5	1.8	1.1	27.14	5.97	75.8	7.41	0.137
2	3.0	0.9	1.1	28	7.91	101.9	8.6	0.137
2	3.0	1.8	1.1	26.84	4.49	57	6.95	0.138
2	3.0	2.7	1.1	26.52	1.08	13.6	6.59	0.141
3	1.6	0.9	1.0	27.24	7.19	91.4	8.08	0.136
hotspot	0.7	0.3	0.7	28.25	7.87	101.9	8.3	0.136
outlet 1	<0.2	<0.2		26.08	3.29	40.9	6.73	0.149
outlet 2	<0.2	<0.2		28	6.62	85.3	7.8	0.136

Season: *Fall*

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	2.5	0.9	1.5	21.4	9.1	100.5	6.96	0.15
1	2.5	1.8	1.5	21.38	9.17	105.3	7.05	0.152
2	3.0	0.9	1.7	21.65	9.53	109.7	7.07	0.147
2	3.0	1.8	1.7	21.47	9.31	107.3	7.04	0.147
2	3.0	2.7	1.7	21.39	8.89	101.9	7.02	0.148
3	2.0	0.9	1.7	21.63	9.72	112.2	7.04	0.147
3	2.0	1.8	1.7	21.47	9.12	105.7	7.04	0.147
hotspot	0.7	0.5		21.55	10.39	119.7	7.15	0.146
outlet 1	0.2	0.2		20.25	8.45	94.8	6.9	0.153
outlet 2	0.3	0.3		21.69	10.52	121.5	7.14	0.148

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Lake Ioscoe

County: PASSAIC

SiteID: NJW04459-019

Municipality: BLOOMINGDALE BORO

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.312	<0.006	0.017	33.8	26	33.7	6.15
2	< 38.41	0.406	<0.006	0.018	40.6	25	33.9	6.13
3	< 38.41	0.38	<0.006	0.018	45.0	25	33.8	6.85
hotspot	< 38.41	0.391	<0.006	0.018				3.26
outlet 1	< 38.41	0.372	0.111	0.081	12.0	30	37.8	2.71
outlet 2	< 38.41	0.42	0.01	0.028	36.1	26	32.9	6.35

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	29.7	0.423	<0.006	0.03	32.3	25	35.2	6.69
2	48.81	0.535	<0.006	0.029	36.2	24	34.9	7.33
3	37.84	0.557	<0.006	0.029	34.4	26	35.2	6.68
hotspot	47.56	0.549	<0.006	0.029	34.7	25	35	6.69
outlet 1	34.28	0.426	0.052	0.053	18.0	25	36.8	6.48
outlet 2	35.5	0.417	<0.006	0.031	35.8	25	35.3	6.91

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Kirkwood Lake **County** Camden
Site ID NJW04459-002 **Municipality** Voorhees Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	79.04	70.8	73.2	74.35 Hypereutrophic
Summer Station 2	80.32	70.66	73.2	74.73 Hypereutrophic
Fall Station 1	80.29	69.77	77.35	75.80 Hypereutrophic
Fall Station 2	95.88	73.28	77.35	82.17 Hypereutrophic

 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Lily pads. Carp.

Fall

-Flocculent green particles throughout lake.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Kirkwood
SiteID: NJW04459-002

County: CAMDEN
Municipality: VOORHEES TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.9	0.5	0.4	29.55	4.42	57.5	6.86	0.231
2	1.0	0.6	0.4	29.41	4.53	59.3	6.89	0.221
outlet	0.9	0.6		29.96	5.83	77.1	7.05	0.215

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.8	0.5	0.3	23.66	5.93	69.9	6.9	0.237
2	0.9	0.8	0.3	23.66	5.87	69.1	6.88	0.231
outlet	0.3	0.3		23.35	5.53	64.8	6.9	0.229

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Kirkwood

County: CAMDEN

SiteID: NJW04459-002

Municipality: VOORHEES TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	180.08	0.613	0.012	0.014	60.2	48	58.5	17.1
2	196.83	0.609	0.009	0.022	59.4	47	56	14.5
outlet	139.41	0.53	0.01	0.023	35.7	43	52.9	10

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	196.44	1.08	<0.006	0.021	54.2	47	57.4	21.3
2	579.03	1.35	<0.006	<0.015	77.5	51	58.1	29.4
outlet	219.82	1.2	0.077	0.065	59.6	47	57	21.4

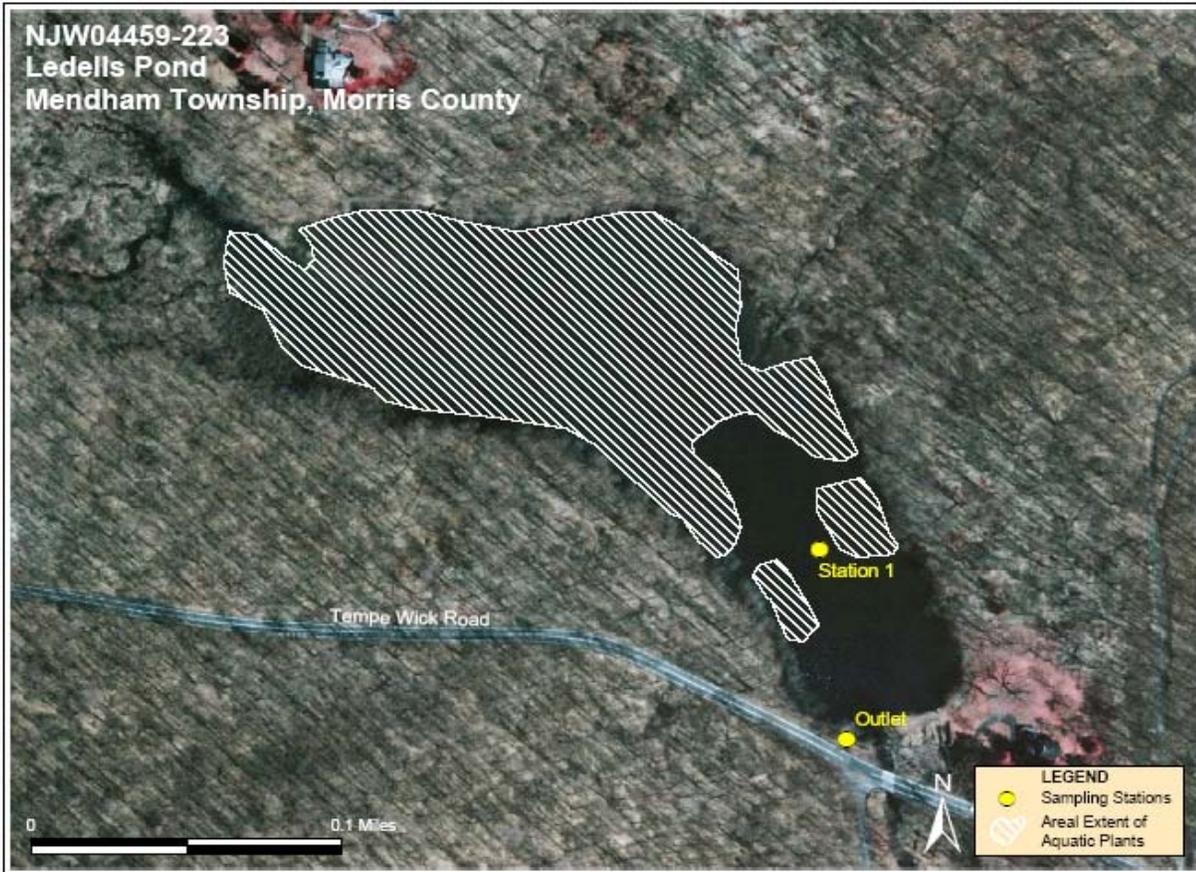
Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Ledells Pond **County** Morris
Site ID NJW04459-223 **Municipality** Mendham Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	62.47	60.72	NA	61.60 Eutrophic
Fall Station 1	63.16	69.05	NA	66.11 Eutrophic

62.47 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Plants obscured accurate Secchi reading.
 Submerged aquatic vegetation. Lily pads. Filamentous algae. Duckweed.
 Frogs. Fish. Snails. Mollusks.

Fall

-No submerged aquatic vegetation visible. Duckweed. Ducks. Heavy rain during two weeks prior to sampling.
 Plants obscured accurate Secchi reading.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Ledells Pond

County: MORRIS

SiteID: NJW04459-223

Municipality: MENDHAM TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.9	0.6	0.9	21.49	1.59	18.6	6.71	0.258
outlet	0.2	0.2		21.45	5.46	63.7	6.87	0.257

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.2	0.6		8.98	8.26	72.3	6.63	0.184
outlet	0.3	0.2		8.61	10.39	90.2	7.3	0.175

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Ledells Pond

County: MORRIS

SiteID: NJW04459-223

Municipality: MENDHAM TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	57.09	0.329	0.271	0.087	21.6	62	100.4	4.27
outlet	31.58	0.187	0.319	0.053	7.4	142	99.9	2.58

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	59.88	0.479	0.58	0.026	9.4	36	63.7	15
outlet	45.57	0.468	0.583	0.023	4.9	34	60.6	12.6

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Long Lake **County** Burlington
Site ID NJW04459-020 **Municipality** Pemberton Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	72.38	77.35	68.83 Eutrophic
Summer Station 2	56.76	50.74	77.35	61.62 Eutrophic
Summer Station 3	56.76	66.09	83.19	68.68 Eutrophic
Fall Station 1	83.38	71.61	77.35	77.45 Hypereutrophic
Fall Station 2	82.36	59.96	77.35	72.23 Hypereutrophic
Fall Station 3	83.04	70.67	77.35	77.02 Hypereutrophic

83.38 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

- Cedar brown water. Many tree stumps on lake bottom.
- Turtles and geese present.

Fall

- Cedar brown water.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Long Lake

County: BURLINGTON

SiteID: NJW04459-020

Municipality: PEMBERTON TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.4	0.9	0.3	24.06	0.11	1.4	4.46	0.051
2	1.4	0.9	0.3	24.37	0.17	2	4.07	0.059
3	1.9	0.9	0.2	23.92	0.06	0.8	4.04	0.057
outlet	1.1	1.1		26.5	5.36	66.5	4.35	0.046

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.0	0.6	0.3	21.32	5.57	63	4.55	0.055
2	0.8	0.5	0.3	22.48	5.63	63.4	4.55	0.055
3	1.6	0.9	0.3	23.09	4.95	58.5	4.6	0.055
outlet	0.5	0.3		23.08	4.68	54.2	4.53	0.055

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Long Lake
SiteID: NJW04459-020

County: BURLINGTON
Municipality: PEMBERTON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	1.19	0.023	0.035	70.7	1	4.8	25.2
2	< 38.41	1.81	0.022	0.104	7.8	1	4.54	9.26
3	< 38.41	1.28	0.017	0.046	37.3	1	4.63	14.1
outlet	152.19	1.23	0.018	0.034	42.0	1	4.83	15.1

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	243.42	0.994	<0.006	0.029	65.4	<1	5.92	18.8
2	227.22	0.807	0.007	0.019	19.9	<1	5.9	17.3
3	237.66	0.969	<0.006	0.023	59.4	<1	5.99	18.3
outlet	259.09	1.03	<0.006	0.021	86.0	<1	5.98	18.7

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Magnolia Lake
Site ID NJW04459-228

County Cape May
Municipality Dennis Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	56.16	NA	56.46 Eutrophic
Summer Station 2	56.76	57.92	NA	57.34 Eutrophic
Fall Station 1	74.14	44.91	NA	59.53 Eutrophic
Fall Station 2	37.88	52.77	NA	45.33 Mesotrophic

74.14 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Submerged aquatic vegetation throughout. Lily pads.

Fall

-No significant observations.

Secchi transparency reaches bottom of lake.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Magnolia Lake

County: CAPE MAY

SiteID: NJW04459-228

Municipality: DENNIS TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.0	0.9	1.0	26.25	6.45	80	5.98	0.117
2	1.3	0.9	1.3	28.4	6.58	84.8	6.39	0.107
outlet	0.9	0.6		28.89	6.46	84.3	6.95	1.419

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.8	0.5	0.8	24.33	7.05	83.7	6.05	0.115
2	0.9	0.8	0.9	25.35	6.26	75.8	6.29	0.108
outlet	0.9	0.5		23.92	4.32	52.6	6.39	8.9

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Magnolia Lake

County: CAPE MAY

SiteID: NJW04459-228

Municipality: DENNIS TWP

Lake Profile Raw Data

Season: Summer

<i>Station</i>	<i>Tot Phos</i> (ug/L)	<i>TKN</i> (mg/L)	<i>Nitrite-Nitrate</i> (mg/L)	<i>Ammonia-N</i> (mg/L)	<i>Chl a</i> (ug/L)	<i>Alk</i> (ppm)	<i>Hard</i> (ppm)	<i>Turbidity</i> (NTU)
1	< 38.41	0.49	0.364	0.049	13.5	14	33.1	2.13
2	< 38.41	0.409	0.082	0.053	16.2	14	23.6	1.98
outlet	< 38.41	0.449	0.072	0.065	9.6	15	43.8	1.81

Season: Fall

<i>Station</i>	<i>Tot Phos</i> (ug/L)	<i>TKN</i> (mg/L)	<i>Nitrite-Nitrate</i> (mg/L)	<i>Ammonia-N</i> (mg/L)	<i>Chl a</i> (ug/L)	<i>Alk</i> (ppm)	<i>Hard</i> (ppm)	<i>Turbidity</i> (NTU)
1	128.24	0.495	0.583	0.064	4.3	13	25.9	1.83
2	<10.37	0.5	0.085	0.066	9.6	12	22.5	1.22
outlet	50.02	0.827	0.086	0.235	10.2	34	401.1	6.12

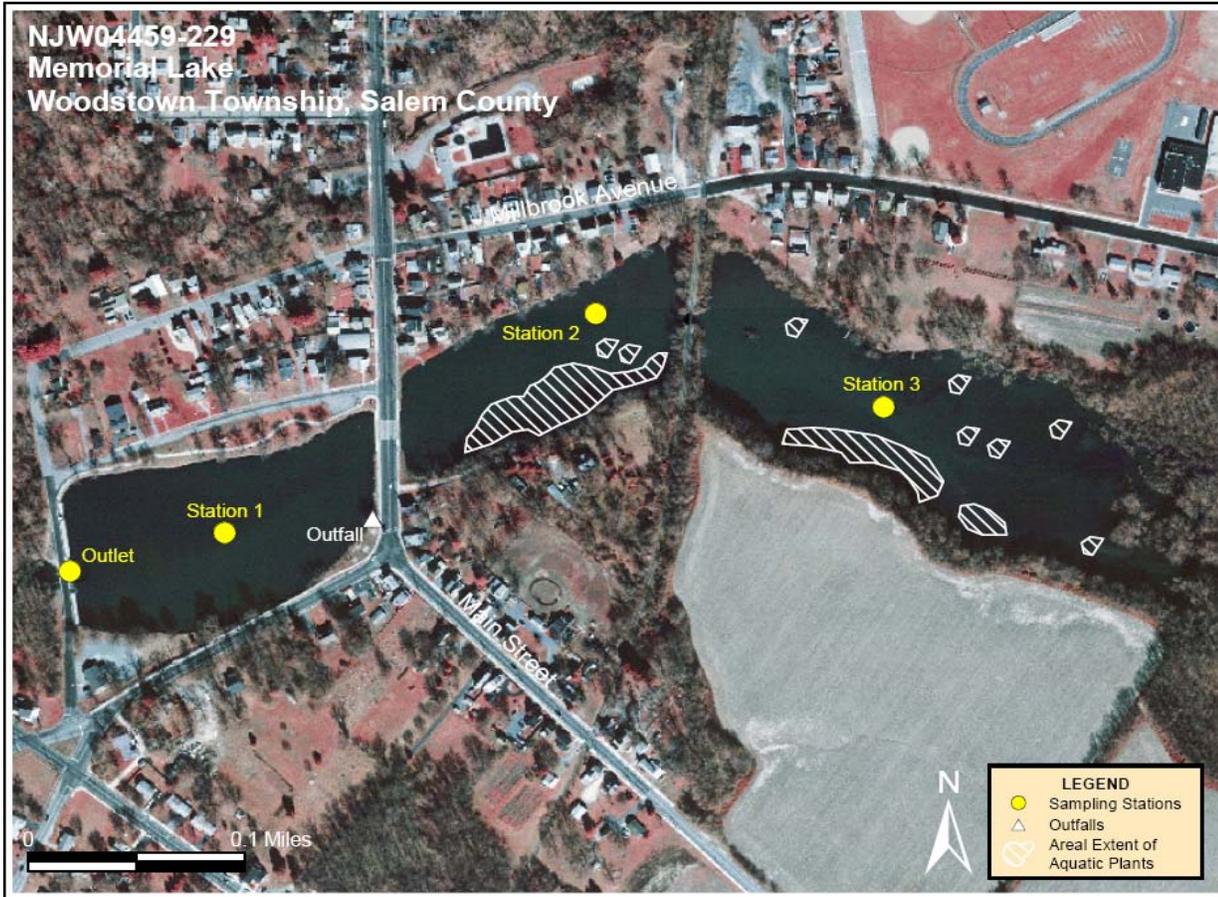
Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Memorial Lake **County** Salem
Site ID NJW04459-229 **Municipality** Woodstown Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	75.21	72.98	77.35	75.18 Hypereutrophic
Summer Station 2	75.22	73.04	77.35	75.20 Hypereutrophic
Summer Station 3	84.25	76.52	79.37	79.37 Hypereutrophic
Fall Station 1	74.53	72.24	73.2	73.32 Hypereutrophic
Fall Station 2	77.42	72.58	77.35	75.78 Hypereutrophic
Fall Station 3	84.45	75.96	77.35	79.25 Hypereutrophic

Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer
 -No significant observations.
Fall
 -No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Memorial Lake
SiteID: NJW04459-229

County: SALEM
Municipality: WOODSTOWN

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.1	0.8	0.3	27.49	7.88	99.7	7.68	0.255
2	1.1	0.8	0.3	27.74	11.16	141.9	8.7	0.259
3	0.9	0.6	0.3	26.73	9.21	116.1	8.41	0.265
outlet	0.6	0.3		28.56	7.33	94.5	8.42	0.252

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.1	0.8	0.4	25.5	6.26	76.1	7.48	0.278
2	1.1	0.8	0.3	25.56	6.28	76.5	7.33	0.276
3	0.9	0.6	0.3	24.44	5.72	68.3	7.44	0.275
outlet	0.6	0.3		25.61	6.4	77.9	7.41	0.279

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Memorial Lake

County: SALEM

SiteID: NJW04459-229

Municipality: WOODSTOWN

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	138.07	1.29	0.104	0.157	75.3	58	90	33.6
2	138.14	1.17	0.336	0.074	75.7	59	95.7	21.4
3	258.41	1.47	0.774	0.136	107.8	58	96	43.9
outlet	131.96	1.55	0.091	0.148	77.2	58	90.1	23.4

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	131.68	0.991	0.507	0.046	69.7	57	104.5	14.4
2	160.93	0.953	0.559	0.075	72.2	58	103.6	23.4
3	262.15		0.614	0.075	101.8	59	102.9	27.8
outlet	134.46	0.928	0.572	0.069	44.9	58	103	12.8

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Lake Manetta
Site ID NJW04459-034

County Ocean
Municipality Lakewood Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	52.43	61.52	56.90 Eutrophic
Summer Station 2	56.76	57.06	63.22	59.01 Eutrophic
Fall Station 1	43.58	57.07	NA	50.33 Eutrophic
Fall Station 2	37.88	48.18	NA	43.03 Mesotrophic

Observations

Summer

-Herbicide treated 7/19/05. Submerged aquatic vegetation. Filamentous algae. Cedar brown color. Fish ladder at outlet.

Fall

-Secchi reading obscured by plants.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Lake Manetta

County: OCEAN

SiteID: NJW04459-034

Municipality: LAKEWOOD TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.2	0.9	0.9	20.11	5.94	65.6	5.8	0.135
2	1.8	0.9	0.8	24.21	4.99	59.6	6.15	0.126
outlet	0.6	0.3		24.58	6.96	84.1	6.56	0.13

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.0	0.9	1.0	18.44	7.48	79.4	5.8	0.131
2	1.7	0.9	1.7	21.86	8.3	94.2	6.63	0.14
outlet	0.6	0.6		22.73	7.6	87.7	6.77	0.149

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Lake Manetta

County: OCEAN

SiteID: NJW04459-034

Municipality: LAKEWOOD TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.386	0.591	0.094	9.3	12	21.7	4.85
2	< 38.41	0.474	0.391	0.075	14.8	12	22	7.72
outlet	< 38.41	0.436	0.339	0.096	18.0	14	24.5	7.86

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	15.4	0.362	0.465	0.029	14.8	13	23.9	4.58
2	<10.37	0.253	0.352	0.027	6.0	15	25.7	3.02
outlet	23.97	0.855	0.286	0.048	9.9	17	28.9	6.75

Sample Device - Horizontal Polycarbonate Sampler

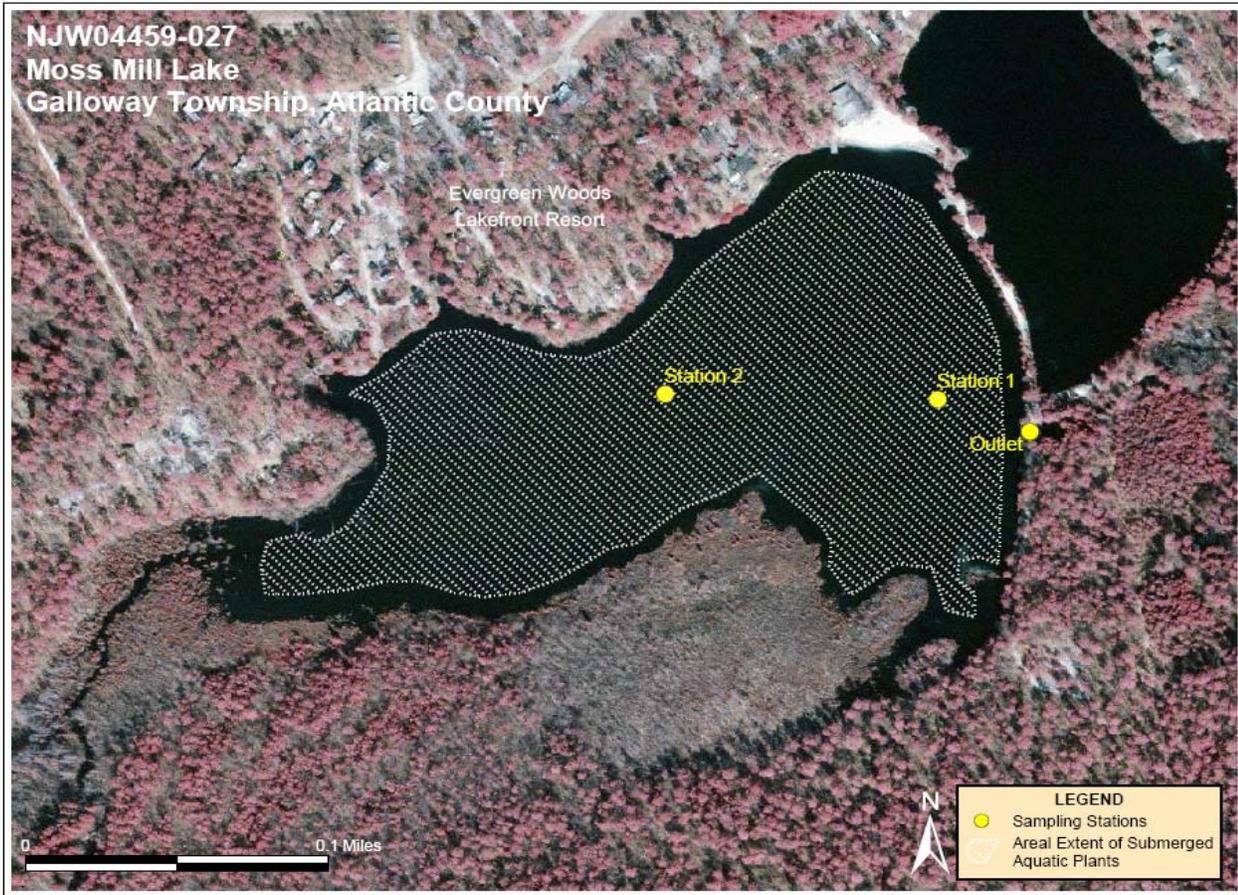
"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Moss Mill Lake
Site ID NJW04459-027

County Atlantic
Municipality Galloway Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	55.94	NA	56.35 Eutrophic
Summer Station 2	56.76	73.93	NA	65.35 Eutrophic
Fall Station 1	37.88	37.85	NA	37.87 Oligotrophic
Fall Station 2	38.82	41.82	NA	40.32 Mesotrophic

Observations

Summer

-Submerged aquatic vegetation throughout.

Fall

-Water level is low due to dam replacement on lake property owned by Stockton College.

*Secchi transparency reaches bottom of lake.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Moss Mill Lake

County: ATLANTIC

SiteID: NJW04459-027

Municipality: GALLOWAY TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.1	0.9	1.1	26.2	7.61		5.32	0.086
2	0.9	0.6	0.9	24.8	7.01		5.31	0.087
outlet	0.3	0.2		26.49	6.65		5.38	0.086

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.9	0.6	0.9	21.92	6.62	75.7	5.42	0.098
2	0.9	0.6	0.9	22.39	6.75	77.9	5.47	0.098
outlet	<0.2	<0.2		21.77	6.99	79.7	5.45	0.098

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Moss Mill Lake

County: ATLANTIC

SiteID: NJW04459-027

Municipality: GALLOWAY TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.223	<0.006	0.02	13.2	4	10.8	3.74
2	< 38.41	0.578	<0.006	0.02	82.8	2	10.8	3.81
outlet	< 38.41	0.166	<0.006	0.029	2.9	2	10.6	0.062

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	<10.37	0.307	<0.006	0.032	2.1	2	11.1	0.74
2	11.07	0.377	<0.006	0.03	3.1	2	11.2	1.73
outlet	<10.37	0.382	<0.006	0.033	1.8	2	11	0.58

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Peddie Lake County Mercer
 Site ID NJW04459-024 Municipality Hightstown Borough



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	63.7	69.96	65.14	66.27 Eutrophic
Summer Station 2	68.33	71.19	65.14	68.22 Eutrophic
Fall Station 1	66.77	66.24	61.52	64.84 Eutrophic
Fall Station 2	62.34	65.11	58.63	62.03 Eutrophic

63.7 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

- Lake cloudy and very turbid. Heavy rain 48 hours prior to sampling.
- Minimal submerged vegetation.

Fall

- Pollen deposition on surface near Station 2.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Peddie Lake

County: MERCER

SiteID: NJW04459-024

Municipality: HIGHTSTOWN BORO

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.5	0.9	0.7	25.13	3.23	39.1	6.2	0.191
1	2.5	1.8	0.7	22.03	0.24	2.7	6.01	0.19
2	2.7	0.9	0.7	24.91	4.7	56.8	6.37	0.233
2	2.7	1.8	0.7	21.36	0.3	3.4	6.04	0.208
outlet	0.5	0.3		28.6	7.05		7.72	0.19

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.5	0.9	0.9	24.45	7.45	88.1	6.94	0.25
1	2.5	1.8	0.9	23.91	7.1	83	6.88	0.249
2	2.5	0.9	1.1	23.92	8.12	95.1	7.04	0.245
2	2.5	1.8	1.1	23.64	7.74	90.2	7.03	0.245
outlet	0.6	0.3		24.23	7.45	87.7	6.97	0.253

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Peddie Lake

County: MERCER

SiteID: NJW04459-024

Municipality: HIGHTSTOWN BORO

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	62.17	0.564	0.661	0.034	55.3	22	41	14
2	85.7	0.519	0.602	0.019	62.6	22	41.3	14
outlet	85.43	0.864	0.565	0.032	111.9	24	41.4	14.6

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	76.89	0.761	0.404	0.096	37.8	36	55.8	7.66
2	56.57	0.545	0.476	0.041	33.7	34	56.2	6.67
outlet	90.9	0.833	0.379	0.165	52.7	34	57.4	7.68

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Pickerel Lake
Site ID NJW04459-008

County Ocean
Municipality Jackson Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	51.18	NA	53.97 Eutrophic
Summer Station 2	56.76	50.36	NA	53.56 Eutrophic
Fall Station 1	37.88	50.29	NA	44.09 Mesotrophic
Fall Station 2	51.35	59.14	NA	55.25 Eutrophic

Observations

Summer

-Submerged aquatic vegetation throughout. Thunderstorms 24 hours prior to sampling.

Fall

-Submerged aquatic vegetation throughout.

*Secchi transparency reaches bottom of lake.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Pickerel Lake

County: OCEAN

SiteID: NJW04459-008

Municipality: JACKSON TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.4	0.9	1.2	27.65	5.42		5.13	0.027
2	0.9	0.6	0.9	27.3	5.6		5.14	0.027
outlet	0.6	0.3		28.43	5.4		5.73	0.033

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.7	0.3	0.7	25.62	6.79	83.9	5.5	0.028
2	0.6	0.3	0.6	25.68	6.9	84.8	5.47	0.028
outlet	0.3	0.2		25.26	5.61	68	5.82	0.032

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Pickerel Lake

County: OCEAN

SiteID: NJW04459-008

Municipality: JACKSON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.221	0.007	0.032	13.1	3	4.62	3.35
2	< 38.41	0.244	0.01	0.032	7.5	2	4.85	3.11
outlet	< 38.41	0.26	0.015	0.046	4.7		6.81	3.39

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	<10.37	0.187	0.056	0.027	7.4	3	4.38	0.99
2	26.4	0.392	0.011	0.028	18.3	3	4.68	5.35
outlet	12.65	0.311	0.014	0.047	21.0	4	7.59	2.61

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Pleasant Valley Lake
 Site ID NJW04459-023

County Sussex
 Municipality Vernon Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	67.83	60	61.53 Eutrophic
Summer Station 2	56.76	68.91	60	61.89 Eutrophic
Summer Station 3	66.43	70.27	60	65.56 Eutrophic
Fall Station 1	55.74	64.06	61.52	60.44 Eutrophic
Fall Station 2	54.62	65.54	61.52	60.56 Eutrophic
Fall Station 3	58.51	67.44	63.22	63.06 Eutrophic

66.43 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Lake treated with SONAR herbicide 5/3/05. Filamentous algae throughout.

Fall

-Lake has strong green tint.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Pleasant Valley Lake

County: SUSSEX

SiteID: NJW04459-023

Municipality: VERNON TWP

Surface to Bottom Profile

Season: *Summer*

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	2.1	0.9	1.0	26.57	5.21	65.8	7.82	0.458
1	2.1	1.8	1.0	26.41	4.04	50.9	7.55	0.462
2	3.6	0.9	1.0	26.96	5.08	64.6	7.84	0.457
2	3.6	1.8	1.0	26.89	4.83	61.4	7.77	0.458
2	3.6	2.7	1.0	26.83	4.8	60.9	7.8	0.458
3	5.1	0.9	1.0	27.1	5.61	71.7	8.06	0.456
3	5.1	1.8	1.0	27.05	5.39	68.8	8.02	0.456
3	5.1	2.7	1.0	27.01	5.16	65.8	7.96	0.457
3	5.1	3.6	1.0	25.85	0.14	1.8	7.04	0.458
3	5.1	4.6	1.0	22.16	0.05	0.6	7.04	0.481

Season: *Fall*

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	1.8	0.9	0.9	18.97	7.25	78.6	8.17	0.488
2	3.3	0.9	0.9	19.6	8.54	93.8	8.4	0.486
2	3.3	1.8	0.9	18.74	4.85	52.3	7.71	0.489
2	3.3	2.7	0.9	18.14	2.85	30.4	7.44	0.494
3	5.8	0.9	0.8	20.35	8.76	97.7	8.48	0.487
3	5.8	1.8	0.8	18.73	5.3	57.2	7.76	0.489
3	5.8	2.7	0.8	18.44	4.1	44.1	7.6	0.489
3	5.8	3.6	0.8	18.33	4.06	43.5	7.58	0.49
3	5.8	4.6	0.8	18.22	3.31	35.4	7.51	0.491
3	5.8	5.4	0.8	18.06	2.08	22.2	7.45	0.496

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Pleasant Valley Lake

County: SUSSEX

SiteID: NJW04459-023

Municipality: VERNON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.348	<0.006	0.018	44.5	100	138.3	5.87
2	< 38.41	0.372	<0.006	0.016	49.7	103	137.7	7.41
3	75.09	0.388	<0.006	0.018	57.0	102	138.8	6.72

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	35.79	0.74	<0.006	0.065	30.3	105	150.8	11
2	33.11	0.72	<0.006	0.071	35.2	102	152	9.93
3	43.37	0.945	<0.006	0.051	42.8	113	149.8	12.5

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name	Silver Lake	County	Camden
Site ID	NJW04459-007	Municipality	Clementon Borough



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	67.56	NA	62.16 Eutrophic
Fall Station 1	37.88	43.54	NA	40.71 Mesotrophic

Observations

Summer

-Submerged aquatic vegetation, filamentous algae abundant. Fish. Water fowl. Macroinvertebrates.

Fall

-Submerged aquatic vegetation abundant.

*Secchi transparency reaches bottom of lake.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Silver Lake
SiteID: NJW04459-007

County: CAMDEN
Municipality: CLEMENTON BORO

Surface to Bottom Profile

Season: Summer

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	1.1	0.9	1.1	24.79	3.28	39.6	6.2	0.18
outlet	0.2	0.2		26.34	6.71	83.1	6.6	0.193

Season: Fall

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	1.0	0.8	1.0	21.49	6.4	72.3	6.2	0.176
outlet	0.2	0.2		21.4	7.08	79.9	6.31	0.208

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Silver Lake

County: CAMDEN

SiteID: NJW04459-007

Municipality: CLEMENTON BORO

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.766	0.85	0.215	43.8	19	30.1	11.4
outlet	< 38.41	0.309	0.699	0.119	8.0	16	29.5	2.8

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	<10.37	0.151	0.976	0.048	3.7	13	27.5	1.76
outlet	<10.37	0.228	0.733	0.065	2.6	14	30.3	2.13

Sample Device - Horizontal Polycarbonate Sampler

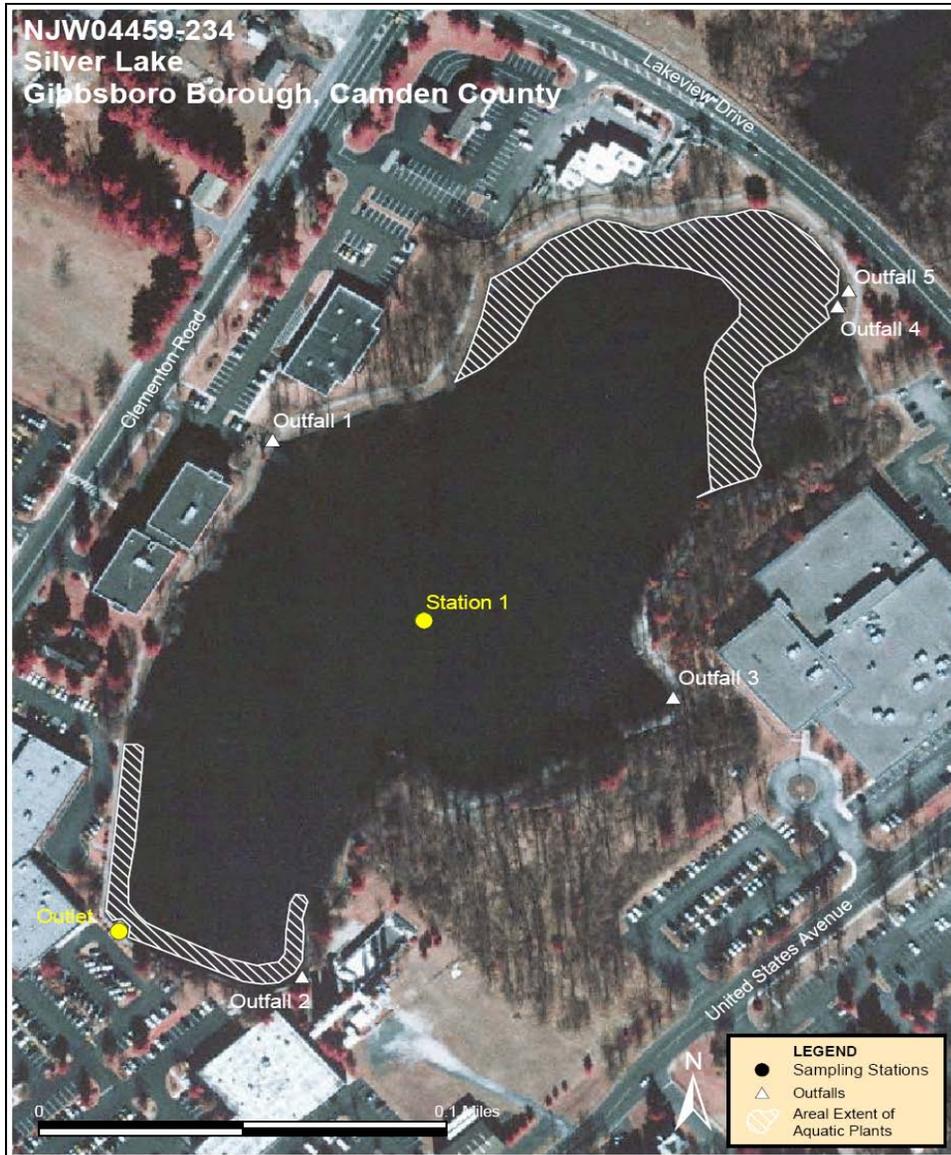
"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Silver Lake
 Site ID NJW04459-234

County Camden
 Municipality Gibbsboro Borough



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	40.63	53.67	51.53	48.61 Mesotrophic
Fall Station 1	39.62	48.17	55.15	47.65 Mesotrophic

Observations

Summer

-Submerged aquatic vegetation, filamentous algae abundant. Fish. Ducks. Snails.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Silver Lake
SiteID: NJW04459-234

County: CAMDEN
Municipality: GIBBSBORO

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.5	0.9	1.8	25.96	5.51	68.2	7.07	0.292
1	2.5	1.8	1.8	25.28	0.07	0.9	6.53	0.304
outlet	2.5	0.2		25.95	4.67	57.5	6.93	0.291

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.6	0.9	1.4	10.34	7.7	67.9	6.97	0.187
1	2.6	1.8	1.4	10.27	7.53	66.3	6.94	0.189
outlet	1.0	0.3		10.99	7.52	67.3	6.83	0.253

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Silver Lake

County: CAMDEN

SiteID: NJW04459-234

Municipality: GIBBSBORO

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	12.55	0.393	<0.006	0.032	10.5	158	73.6	3.24
outlet	55.4	0.393	<0.006	0.029	7.2	67	72.4	2.73

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	11.7	0.774	0.125	0.252	6.0	42	55.5	6.48
outlet	18.84	0.835	0.178	0.266	3.7	51	67.7	7.61

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Lake Stockholm **County** Sussex
Site ID NJW04459-021 **Municipality** Hardyston Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	45.49	56.06	NA	50.78 Eutrophic
Summer Station 2	50.3	57.57	50.01	52.63 Eutrophic
Fall Station 1	44.51	55.8	61.52	53.94 Eutrophic
Fall Station 2	49.56	57.81	65.14	57.50 Eutrophic

Observations

Summer

-Plants obscured Secchi reading at Station 1. Submerged aquatic vegetation.
 Lake treated with copper sulfate 8/19/05.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Lake Stockholm
SiteID: NJW04459-021

County: SUSSEX
Municipality: HARDYSTON TWP

Surface to Bottom Profile

Season: Summer

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	1.8	0.9	1.8	23.6	5.82	70.5	7.54	0.434
2	4.0	0.9	2.0	23.83	5.16	62.8	7.42	0.433
2	4.0	1.8	2.0	23.77	5.18	63	7.41	0.434
2	4.0	2.7	2.0	23.69	5.47	66.4	7.44	0.434
2	4.0	3.6	2.0	22.99	5.41	64.8	7.44	0.435

Season: Fall

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	1.9	0.9	0.9	8.55	9.58	82.3	7.17	0.317
1	1.9	1.8	0.9	8.47	4.16	36	7.08	0.313
2	4.7	0.9	0.7	9.17	9.35	81.9	7.37	0.321
2	4.7	1.8	0.7	9.11	9.33	81.4	7.45	0.32
2	4.7	2.7	0.7	9.06	9.35	82.1	7.45	0.321
2	4.7	3.6	0.7	8.63	9.19	79.4	7.4	0.329
outlet	0.2	0.2		9.15	9.84	86.3	7.18	0.323

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Lake Stockholm

County: SUSSEX

SiteID: NJW04459-021

Municipality: HARDYSTON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	17.58	0.35	<0.006	0.026	13.4	143	78.8	2.3
2	24.55	0.387	<0.006	0.036	15.6	144	77.5	3.1

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	16.43	0.354	0.24	<0.004	13.1	44	63.1	3.13
2	23.31	0.367	0.238	<0.004	16.0	47	64.7	2.22
outlet	17.15	0.396	0.247	<0.004	14.7	46	64.5	1.95

Sample Device - Horizontal Polycarbonate Sampler

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-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Sunset Lake **County** Somerset
Site ID NJW04459-040 **Municipality** Bridgewater Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	61.67	70.45	61.52	64.54 Eutrophic
Summer Station 2	63.77	77.36	65.14	62.75 Eutrophic
Fall Station 1	55.81	46.03	65.14	57.89 Eutrophic
Fall Station 2	56.11	45.62	61.52	67.50 Eutrophic

63.77 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Lake treated with copper sulfate 8/19/05.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Sunset Lake

County: SOMERSET

SiteID: NJW04459-040

Municipality: BRIDGEWATER TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	3.2	0.9	0.9	25.61	6.31	79.6	7.76	0.399
1	3.2	1.8	0.9	25.46	5.23	65.9	7.55	0.4
1	3.2	2.7	0.9	24.47	0.13	1.6	6.77	0.414
2	2.6	0.9	0.7	26.19	8.2	104.6	8.25	0.397
2	2.6	1.8	0.7	26.11	7.6	96.8	8.19	0.398
outlet	0.3	0.2		25.66	4.55	57.5	7.17	0.415

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	3.6	0.9	0.7	10.87	9.3	84.2	7.33	0.222
1	3.6	1.8	0.7	10.86	9.13	83.7	7.23	0.223
1	3.6	2.7	0.7	10.74	9.11	83.9	7.18	0.226
2	2.1	0.9	0.9	10.66	9.68	87.6	7.11	0.223
2	2.1	1.8	0.9	10.66	9.48	85.9	7.11	0.224
outlet	0.3	0.2		10.96	10.76	98.8	7.56	0.226

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Sunset Lake
SiteID: NJW04459-040

County: SOMERSET
Municipality: BRIDGEWATER TWP

Lake Profile Raw Data

Season: Summer

<i>Station</i>	<i>Tot Phos</i> (ug/L)	<i>TKN</i> (mg/L)	<i>Nitrite-Nitrate</i> (mg/L)	<i>Ammonia-N</i> (mg/L)	<i>Chl a</i> (ug/L)	<i>Alk</i> (ppm)	<i>Hard</i> (ppm)	<i>Turbidity</i> (NTU)
1	53.98	0.431	<0.006	0.027	58.1	215	133.3	7.53
2	62.44	0.507	<0.006	0.028	117.5	218	134	9.62
outlet	64.88	0.538	0.007	0.034	47.4	215	133.1	6.41

Season: Fall

<i>Station</i>	<i>Tot Phos</i> (ug/L)	<i>TKN</i> (mg/L)	<i>Nitrite-Nitrate</i> (mg/L)	<i>Ammonia-N</i> (mg/L)	<i>Chl a</i> (ug/L)	<i>Alk</i> (ppm)	<i>Hard</i> (ppm)	<i>Turbidity</i> (NTU)
1	35.97	0.493	0.764	0.015	4.8	38	69.4	8.82
2	36.72	0.438	0.783	0.012	4.6	41	69.4	8.94
outlet	35.12	0.461	0.76	0.017	2.2	35	69.4	9.29

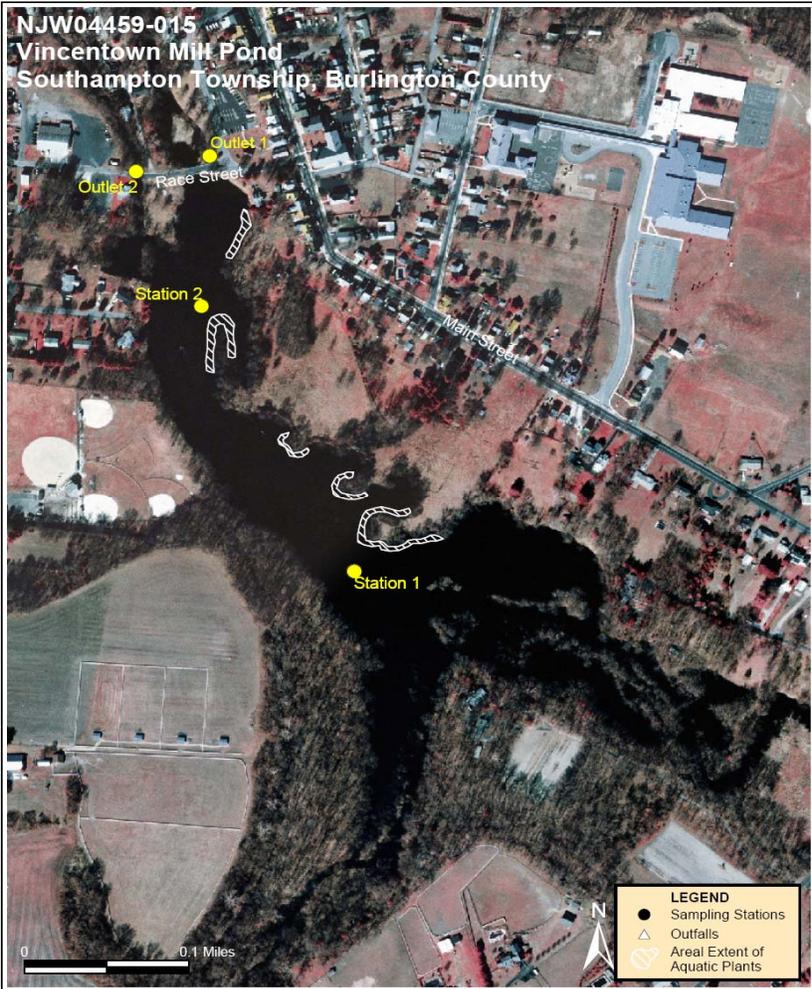
Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Vincetown Mill Pond **County** Burlington
Site ID NJW04459-015 **Municipality** Southampton Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	63.84	56.4	69.99	63.41 Eutrophic
Summer Station 2	63.79	47	69.99	60.26 Eutrophic
Fall Station 1	81.06	47.43	67.36	65.28 Eutrophic
Fall Station 2	79.14	60.89	67.36	69.13 Eutrophic

63.84 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Fish ladder at outlet. Recent bridge/dam structure construction completed.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Vincentown Millpond
SiteID: NJW04459-015

County: BURLINGTON
Municipality: SOUTHAMPTON TWP

Surface to Bottom Profile

Season: Summer

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	1.1	0.9	0.5	27.48	4.42	55.8	4.85	0.079
2	1.5	0.9	0.5	27.04	3.4	42.6	5.01	0.082
outlet	0.9	0.9		28.18	5.19	66.4	4.92	0.079

Season: Fall

<i>Station</i>	<i>Tot. Depth (M)</i>	<i>Profile Depth (M)</i>	<i>Secchi (M)</i>	<i>Water Temp (C)</i>	<i>DO (mg/L)</i>	<i>DO (%Sat)</i>	<i>pH (SU)</i>	<i>Conductivity (mS/cm)</i>
1	1.1	0.9	0.6	22.36	3.86	44.3	4.66	0.092
2	1.3	0.9	0.6	21.78	2.35	26.7	4.69	0.095
outlet	0.6	0.3		23.71	5.89	69.5	4.74	0.092

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Vincentown Millpond

County: BURLINGTON

SiteID: NJW04459-015

Municipality: SOUTHAMPTON TWP

Lake Profile Raw Data

Season: Summer

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	62.77	0.908	0.189	0.154	13.9	5	14.6	7.38
2	62.56	0.938	0.177	0.204	5.3	5	16.7	9.35
outlet	57.98	0.926	0.184	0.172	14.4	4	15.2	8

Season: Fall

<i>Station</i>	<i>Tot Phos</i> <i>(ug/L)</i>	<i>TKN</i> <i>(mg/L)</i>	<i>Nitrite-Nitrate</i> <i>(mg/L)</i>	<i>Ammonia-N</i> <i>(mg/L)</i>	<i>Chl a</i> <i>(ug/L)</i>	<i>Alk</i> <i>(ppm)</i>	<i>Hard</i> <i>(ppm)</i>	<i>Turbidity</i> <i>(NTU)</i>
1	207.17	0.446	0.056	0.091	5.6	2	13.3	4.71
2	181.4	0.635	0.019	0.059	21.9	2	14.2	4.75
outlet	177.42	0.578	0.026	0.07	17.0	3	14.4	5.01

Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Wampum Lake **County** Monmouth
Site ID NJW04459-222 **Municipality** Eatontown Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	58	68.72	63.22	63.31 Eutrophic
Summer Station 2	60.71	64.32	63.22	63.22 Eutrophic
Fall Station 1	37.88	65.81	69.99	57.89 Eutrophic
Fall Station 2	63.46	69.05	69.99	67.50 Eutrophic

63.46 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

-Submerged aquatic vegetation.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Wampum Lake
SiteID: NJW04459-222

County: MONMOUTH
Municipality: EATONTOWN BORO

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.1	0.8	0.8	22.69	5.5		6.54	0.403
2	1.7	0.9	0.8	23.7	3.98		6.55	0.413
outlet	0.3	0.2		24.81	7.32		6.85	0.412

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.9	0.6	0.5	21.97	7.54	86.1	6.59	0.423
2	1.7	0.9	0.5	22.06	5.37	61.4	6.73	0.423
outlet	0.6	0.3		22.71	7.56	87.7	7.01	0.424

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Wampum Lake

County: MONMOUTH

SiteID: NJW04459-222

Municipality: EATONTOWN BORO

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	41.87	0.435	0.59	0.069	48.7	37	90.5	18.6
2	50.53	0.765	0.593	0.179	31.1	37	89.8	26.1
outlet	59.44	0.659	0.613	0.157	39.1	38	88.9	24.7

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	<10.37	0.465	0.394	0.04	36.2	37	97.3	11.7
2	61.15	0.528	0.419	0.072	50.3	36	97	15.5
outlet	61.55	0.552	0.402	0.074	60.4	39	99.6	13.7

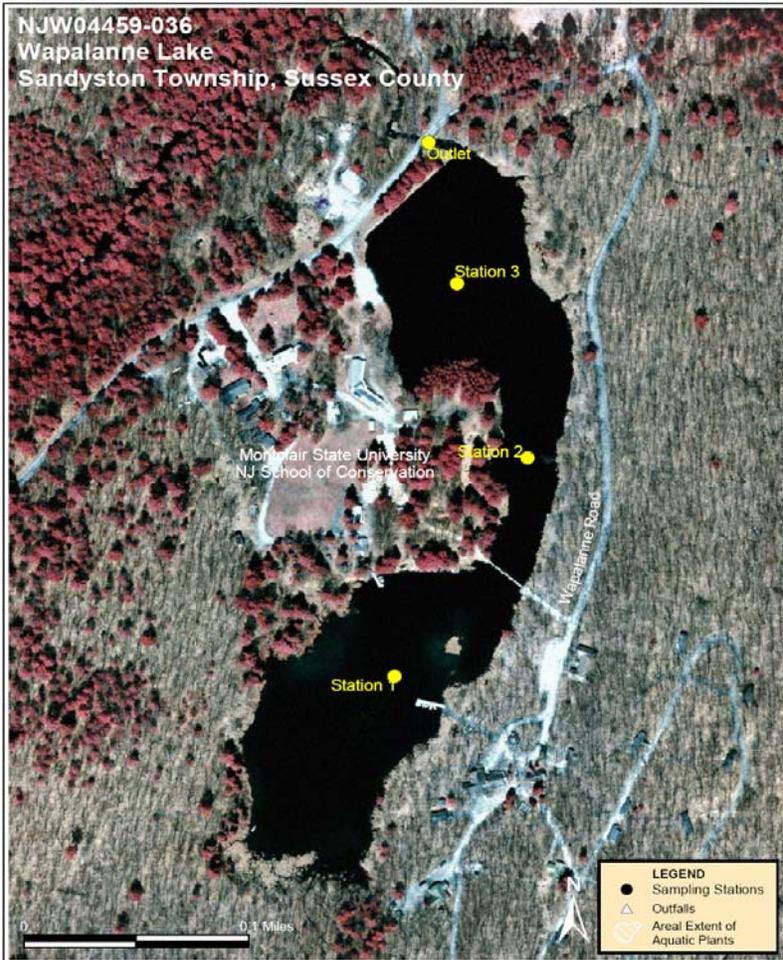
Sample Device - Horizontal Polycarbonate Sampler

"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

-A blank parameter result means the parameter could not be analyzed due to laboratory error.

AMBIENT LAKE MONITORING NETWORK

Lake Name Wapalanne Lake **County** Sussex
Site ID NJW04459-036 **Municipality** Sandyston Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	60.66	57.76	NA	59.21 Eutrophic
Summer Station 2	51.36	56.06	NA	53.71 Eutrophic
Summer Station 3	46.79	60.86	51.53	51.53 Eutrophic
Fall Station 1	37.88	15.33	NA	26.61 Oligotrophic
Fall Station 2	37.88	19.06	NA	28.47 Oligotrophic
Fall Station 3	39.27	20.93	NA	30.10 Oligotrophic

Observations

Summer

-Secchi transparency reaches bottom of lake, except Station 3.

Fall

-Secchi transparency reaches bottom of lake.

Spotted newts observed.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Wapalanne Lake
SiteID: NJW04459-036

County: SUSSEX
Municipality: SANDYSTON TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.8	0.6	0.8	24.13	10.69	130.9	9.08	0.076
2	1.4	0.9	1.4	23.85	7.64	93.2	8.02	0.071
3	2.2	0.9	1.8	23.77	7.26	88.2	7.57	0.07
3	2.2	1.8	1.8	23.2	2.11	25.2	6.43	0.073
outlet	0.2	0.2	0.2	24.45	7.64	94.2	7.95	0.07

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	0.8	0.6	0.8	7.85	9.19	79.4	6.92	0.04
2	1.2	0.9	1.2	8.78	9.72	85.1	6.56	0.039
3	1.4	0.9	1.4	7.87	9.88	85.6	6.6	0.038
3	1.4	1.4	1.4	7.62	9.83	84.2	6.66	0.038
outlet	0.2	0.2		8.81	9.99	87.8	8.91	0.039

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Wapalanne Lake

County: SUSSEX

SiteID: NJW04459-036

Municipality: SANDYSTON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	50.35	0.365	<0.006	0.029	15.9	76	34	5.21
2	26.41	0.286	0.009	0.026	13.4	71	31.8	3.29
3	19.24	0.282	0.008	0.026	21.9	68	31.4	2.45
outlet	16.82	0.359	0.008	0.03	13.1	69	30.9	2.18

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	<10.37	0.193	<0.006	<0.004	0.2	9	15.4	0.89
2	<10.37	0.212	<0.006	<0.004	0.3	9	15.5	1.11
3	11.42	0.281	<0.006	<0.004	0.4	8	14.6	0.69
outlet	<10.37	0.209	<0.006	<0.004	0.4	6	16.4	2.81

Sample Device - Horizontal Polycarbonate Sampler

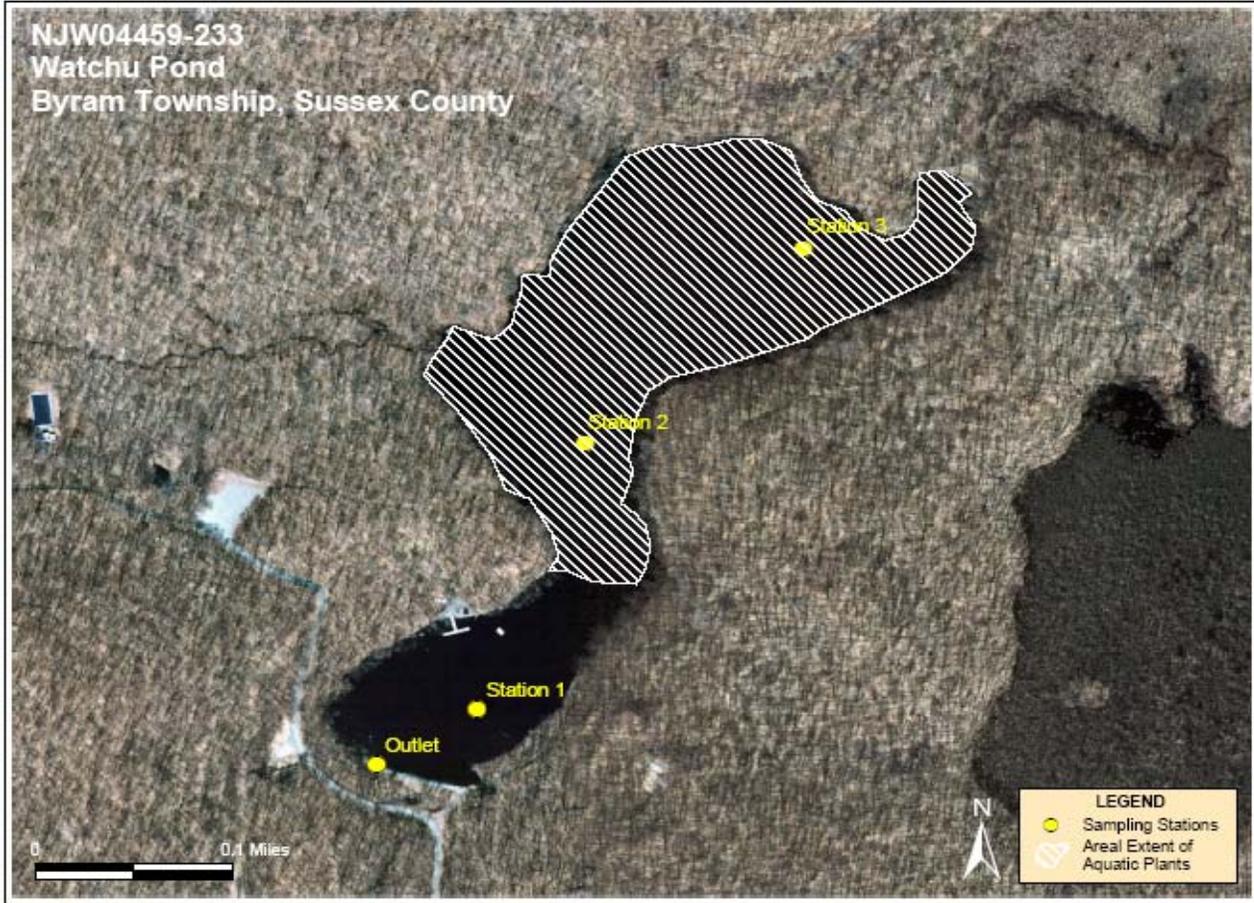
"<" indicates the result is at a concentration below the analytical method's Reporting Limit (RL). See Volume 1, Methods.

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AMBIENT LAKE MONITORING NETWORK

Lake Name Watchu Pond
Site ID NJW04459-233

County Sussex
Municipality Byram Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	58.32	61.52	58.87 Eutrophic
Summer Station 2	61.07	62.24	77.35	66.89 Eutrophic
Fall Station 1	40.9	43.87	63.22	49.66 Mesotrophic
Fall Station 2	62.75	47.72	63.22	57.89 Eutrophic
Fall Station 3	37.88	58.23	61.52	52.54 Eutrophic

62.75 Total Phosphorus exceeds SWQC (See Datasheet for actual concentration)

Observations

Summer

- Station 3 could not be sampled in the summer; excessive plant growth inhibited passage of boat.
- Submerged aquatic vegetation throughout.

Fall

- Submerged aquatic vegetation dense throughout.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Watchu Pond
SiteID: NJW04459-233

County: SUSSEX
Municipality: BYRAM TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.4	0.9	0.9	25.7	2.73	33.6	6.97	0.129
2	1.1	0.9	0.3	24.1	1.65	19.7	6.02	0.14

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	1.1	0.9	0.8	12.98	8.2	73.4	7.48	0.098
2	1.3	0.9	0.8	12.39	8.34	67.6	7.46	0.079
3	1.1	0.8	0.9	13.12	7.8	60.2	7.35	0.079
outlet	0.2	0.2		13.01	8.39	74	7.14	0.104

-Secchi measurements are not recorded for outlets.

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-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: Watchu Pond
SiteID: NJW04459-233

County: SUSSEX
Municipality: BYRAM TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.541	<0.006	0.022	16.9	63	64.2	2.23
2	51.79	0.585	<0.006	0.023	25.2	62	64.4	2.77

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	12.79	0.4	<0.006	0.019	3.9	34	46.7	0.77
2	58.18	0.414	<0.006	0.014	5.7	27	40.6	1.25
3	<10.37	0.493	<0.006	0.01	16.7	25	36.1	2.86
outlet	35.67	0.681	<0.006	0.029	6.0	42	50.5	0.55

Sample Device - Horizontal Polycarbonate Sampler

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AMBIENT LAKE MONITORING NETWORK

Lake Name	White Rock Lake	County	Morris
Site ID	NJW04459-226	Municipality	Jefferson Twp.



Carlson's Trophic Index (TSI)

Season	TSIP	TSIC	TSIS	TSI
Summer Station 1	56.76	59.1	51.53	55.80 Eutrophic
Fall Station 1	51.21	61.16	55.15	55.84 Eutrophic

Observations

Summer

-Duckweed. Filamentous algae. Cattails.

Fall

-No significant observations.

AMBIENT LAKE MONITORING NETWORK

Lake Name: White Rock Lake
SiteID: NJW04459-226

County: MORRIS
Municipality: JEFFERSON TWP

Surface to Bottom Profile

Season: Summer

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.7	0.9	1.8	27.21	5.83	75.2	7.71	0.454
1	2.7	1.8	1.8	27.02	5.29	68.1	7.59	0.455
outlet	<0.2	<0.2		26.46	6.07	77.3	7.81	0.456

Season: Fall

Station	Tot. Depth (M)	Profile Depth (M)	Secchi (M)	Water Temp (C)	DO (mg/L)	DO (%Sat)	pH (SU)	Conductivity (mS/cm)
1	2.6	0.9	1.4	20.25	5.82	65.6	7.4	0.462
1	2.6	1.8	1.4	20.08	5.4	60.7	7.37	0.462

-Secchi measurements are not recorded for outlets.

-A blank Secchi measurement for lake stations means that an accurate measurement could not be recorded because visibility was obscured by vegetation.

-A blank parameter result means the parameter could not be measured due to a meter malfunction.

AMBIENT LAKE MONITORING NETWORK

Lake Name: White Rock Lake

County: MORRIS

SiteID: NJW04459-226

Municipality: JEFFERSON TWP

Lake Profile Raw Data

Season: Summer

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	< 38.41	0.359	<0.006	0.02	18.3	71	119.1	2.47
outlet	< 38.41	0.531	0.05	0.088	17.7	74	120.8	3.34

Season: Fall

Station	Tot Phos (ug/L)	TKN (mg/L)	Nitrite-Nitrate (mg/L)	Ammonia-N (mg/L)	Chl a (ug/L)	Alk (ppm)	Hard (ppm)	Turbidity (NTU)
1	26.15	0.551	<0.006	0.024	22.5	92	122.1	3.63

Sample Device - Horizontal Polycarbonate Sampler

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