

# Jefferson Township (1414)

## Introduction

This municipal chapter is an element of the Morris County Wastewater Management Plan prepared by the Morris County Department of Planning and Public Works, Division of Planning and Preservation (P&P) in accordance with N.J.A.C. 7:15.

Jefferson Township was named after Thomas Jefferson and incorporated in 1894. The Township is located in the northwest portion of Morris County and encompasses approximately 43.0 square miles, the third largest municipality in the county. The Township is characterized by large forested tracts and numerous lakes. Approximately 50% of the Township consists of protected open space and recreation areas, including Mahlon Dickerson Reservation, the County's largest park and the Berkshire Valley Golf Course, built on the site of a former quarry. Lake Hopatcong, located along the Township's southwestern boundary is the largest man-made freshwater lake in the State. Residential development occurred originally as summer homes around these water bodies. The commercial uses are concentrated along sections of Route 15 and Berkshire Valley Road, the major north-south roadways in the Township. The Township zoning designations are shown on Map 4M.

The Census Bureau population count for Jefferson Township was 21,314 in 2010. The Township experienced steady growth of 8.1% since 2000.

Following are some important considerations for this municipality with respect to wastewater management planning:

- Jefferson Township is considered a non-urban municipality.
- 88% of Jefferson Township is located in the New Jersey Highlands (Highlands) Preservation Area and the remaining 12% is located in the Highlands Planning Area. This WMP only addresses the portion of Jefferson Township located within the Highlands Planning Area.

## Existing Infrastructure

The existing wastewater collection and conveyance infrastructure within this municipality consists of the following:

- Collection System – There is no collection system in the Highlands Planning Area in Jefferson Township. The only collection system is associated with the White Rock and Moosepac SSA's located in the northern portion of the township, in the Highlands Preservation Area.
- Pumping Stations – There are seven (7) existing pump stations in the White Rock and Moosepac SSA's. A pump station at Moosepac will be modified when

Moosepac/Water's Edge STP goes off line to switch the sewage direction and pump effluent from Moosepac to White Rock STP.

The existing major wastewater treatment facilities located within the municipality include:

- Water's Edge/Moosepac STP - Jefferson Township has indicated they plan to close this facility and modify an existing pump station. Flow from this pump station will be directed to the White Rock STP. (see Significant Actions) The existing SSA for this facility is entirely in the Highlands Preservation Area.
- White Rock Lake STP serves an area in the northeast portion of the Township in the Highlands Preservation Area.

Tables 1a and 1b include additional minor facilities in Jefferson Township regulated through NJDEP that have individual New Jersey Pollutant Discharge Elimination System (NJPDES) discharge permits. Table 1a shows facilities which are indicated as discharge to groundwater (DGW) and Table 1b shows facilities indicated as discharge to surface water (DSW).

The existing treatment facilities are illustrated on Map 2M.



**Table 1a: Additional NJPDES (DGW) Minor Permitted Facilities within Jefferson Township**

NJPDES Permit Number	Facility Name	Permit Program Code	Receiving Stream or Aquifer	Classification	Permittee	Contact Organization Name	Block	Lot	Permitted Flow (gpd)	Existing Flow <sup>1</sup> (gpd)	Future Flow <sup>1</sup> (gpd)	Discharge Category
NJ0065820	Seneca Garden Apartments	DGW	Crystalline Rocks	II-A	Jerold Goldberg	Seneca Garden Apartments LLC	249	17	16,350	5,100	16,350	Sanitary
NJ0068331	Sandy Point Mobile Home Park	DGW	Glacial Drift	II-A	Sharon Leek	Sandy Point Park & Marina LLC	133	1	7,500	7,500	7,500	Sanitary
NJ0089028	Jefferson Village Square	DGW	Crystalline Rocks	II-A	Richard F. Lubkin	HRA Management & Consulting Co	272.01	18	1,967	1,420	1,967	Sanitary
NJ0108243	Pathmark Supermarket	DGW	Crystalline Rocks	II-A	David Kelly	Pathmark Stores Inc	273	1	10,000	7,840	10,000	Sanitary
NJ0133558	Jefferson Village WTP	DGW	Crystalline Rocks	II-A	Steve Curtis	Applied Wastewater Management Inc	250.3	1.02	125,000	87,800	125,000	Sanitary
NJ0141445	Berkshire Valley Golf Course	DGW	Shawangunk and Green Pond	II-A	David D. Helmer	Morris County Park Commission	387	1	3,485	2,500	3,485	Sanitary
NJ0147575	McDonalds Restaurant	DGW		II-A	Frank Stimmler	Stimmler Foods Inc	272.01	19	3,745	3,745	3,745	Sanitary
Not issued yet	Highlander View Apartments	DGW	IMR Aquifer	II	Green and Fifteen, LLC	Green and Fifteen, LLC	273.01	2,061, 2,062	7,950	0	7,950	Sanitary
Not issued yet	Rt. 15 Properties On-Site Facility	DGW	IMR Aquifer	II	Rt. 15 Properties LLC	Rt. 15 Properties LLC	273.02 273.01	1&2 11	7,945	0	7,945	Sanitary
NJG0102741	Ellen T. Briggs School	T1			James E. Tasker	Jefferson Township Board of Education	232.03	6.01				Sanitary



Table 1a (Continued): Additional NJPDES (DGW) Minor Permitted Facilities within Jefferson Township

NJPDES Permit Number	Facility Name	Permit Program Code	Receiving Stream or Aquifer	Classification	Permittee	Contact Organization Name	Block	Lot	Permitted Flow (gpd)	Existing Flow <sup>1</sup> (gpd)	Future Flow <sup>1</sup> (gpd)	Discharge Category
NJG0103284	Willow Lake Day Camp	T1			Wendy Saiff	Wendy Saiff	329	5				Sanitary
NJG0106968	Lakeside Shopping Center	T1			Nicholas Seretis	Seretis Properties LLC	273.01	2				Sanitary
NJG0107832	RLM Development Corp	T1			Ralph Lamana	RLM Development Corp	233.03	29.02, 29.01				Sanitary
NJG0108570	Jefferson Gardens	T1			Sandra Lebzelter	Jefferson Gardens Association	249	4				Sanitary
NJG0128350	Sonny's Restaurant & 8 Apts.	T1			Joe Rodriquez	Swann Lake Enterprises LLC	422	2				Sanitary
NJG0128830	Green Valley Shopping Center	T1			John Wheeler	John Wheeler	458	3				Sanitary
NJG0129551	New Orleans Steak House	T1			Jimmy Apostolopoulos	Jimmy Apostolopoulos	260.01	1				Sanitary
NJG0136379	Casa Bianca Restaurant	T1			Sefula Seji	Casa Bianca Restaurant	369.01	1				Sanitary
NJG0140007	Olympus Gym	T1			Olympus Gym/John Barbero	Jefferson Fitness Center	249	3.10				Sanitary

<sup>1</sup>Flow indicated is daily maximum flow





Table 1a (Continued): Additional NJPDES (DGW) Minor Permitted Facilities within Jefferson Township

NJPDES Permit Number	Facility Name	Permit Program Code	Receiving Stream or Aquifer	Classification	Permittee	Contact Organization Name	Block	Lot	Permitted Flow (gpd)	Existing Flow <sup>1</sup> (gpd)	Future Flow <sup>1</sup> (gpd)	Discharge Category
NJG0142727	<i>Wendy's Restaurant</i>	T1			David C. Cahill	728 Route 15 South LLC	249	1				Sanitary
NJG0142808	<i>Jefferson Hills Garden Apartments</i>	T1			Michael Pinter	Michael J. Pinter	573	25				Sanitary
NJG0156973	<i>Jefferson House Restaurant</i>	T1			William Orth	Jefferson House Corp	196	38				Sanitary
NJG0159930	<i>Oak Mobile Home Park</i>	T1			Vincent O'Rourke	Milton Oakridge Associates LLC	456	24				Sanitary
NJG0168491	<i>San Bar Mobile Home Park</i>	T1			Al Porfido	YB Properties LLC	209	2				Sanitary
NJG0188395	<i>Viana Assoc Inc.</i>	T1			Manuel Guarda	Manuel Guarda	233.03	29.031, 29.032, 29.033				Sanitary
NJG0188255	<i>Mahlon Dickerson Reservation</i>	T1			David D. Helmer	Morris County Park Commission	335 446	7 9,14				Sanitary
NJG0237566	<i>The Windlass Restaurant</i>	T1			Lisa Palanchi	Rusty Cleat, LLC	196	16				Sanitary

<sup>1</sup>Flow indicated is daily maximum flow

Facility Names in italics are T1's.



**Table 1b: Additional NJPDES (DSW) Minor Permitted Facilities within Jefferson Township**

<b>NJPDES Permit Number</b>	<b>Facility Name</b>	<b>Permit Program Code</b>	<b>Receiving Stream or Aquifer</b>	<b>Classification</b>	<b>Permittee</b>	<b>Contact Organization Name</b>	<b>Block</b>	<b>Lot</b>	<b>Permitted Flow (gpd)</b>	<b>Existing Flow<sup>1</sup> (gpd)</b>	<b>Future Flow<sup>1</sup> (gpd)</b>	<b>Discharge Category</b>
NJ0021105	Arthur Stanlick School	DSW	Lake Shawnee	FW2-NT(C2)	Alice Robinson	Jefferson Township	273	5	7,095	3,143	7,095	Sanitary
NJ0021091	Jefferson Township High-Middle School	DSW	Russia Brook	FW2-TM(C2)	Dora Mylchreest	Jefferson Township Board of Education	336	10.01	27,500	15,950	27,500	Sanitary

<sup>1</sup>Flow indicated is monthly average flow



## Environmental and Other Land Features

County-wide Environmental Features are shown on maps 5A & 5B.

Jefferson Township contains Interstate 80 just clipping the southern border of the Township with Route 15 and Route 181 located in the western portion of the Township and Route 23 located along the northeastern border. Jefferson Township contains large state and county open space and recreational areas including Mahlon Dickerson Reservation, Berkshire Valley State Wildlife Management Area, and Minisink Park. Lake Hopatcong, New Jersey's largest fresh water lake, is located in the western portion of the Township. There are numerous water bodies, tributaries, streams and wetlands throughout the Township. Oak Ridge Reservoir and the Pequannock River form the northeastern border of the Township. Lakes include Longwood Lake, Lake Swannanoa, Lake Shawnee, Cozy Lake and Moosepac Pond. The headwaters of the Rockaway River originate in Jefferson Township with multiple tributaries and associated wetlands. Multiple large tributaries including Weldon Brook, Beaver Brook and Russia Brook drain through the township with their own tributaries and associated wetlands.

## Delineation of Service Areas and Planning Integration

### Sewer Service Areas

Following are the sewer service areas within Jefferson Township. The existing areas served and future SSAs are shown on Maps 2M and 3M, respectively. The facilities providing treatment to these service areas have associated facilities tables in the Appendix C.

- Musconetcong STP (NJPDES NJ0027821; DSW) – This SSA is planned to serve the area around Lake Hopatcong in the western portion of the Township in the Highlands Planning Area. The Musconetcong Sewerage Authority (MSA) at this time has an approved and operative total capacity of 4.31 million gallons per day (MGD), as described in NPDES Permit No. NJ0027821. MSA is a sewerage authority that provides service under contracts to Byram Township and six other municipalities (Hopatcong Borough, Mount Arlington Borough, Mount Olive Township, Netcong Borough, Roxbury Township and Stanhope Borough). It is noted that MSA's NPDES Permit No. NJ0027821 has two different flows upon which its discharge limitations were based. At this time, the 4.31 MGD flow is operative. However, MSA has received NJDEP approval for an increase to 5.79 MGD when the permittee complies with Part IV, E.2.a of the Final Permit issued on December 1, 2011. However, an increase in flow to 5.79 MGD shall have no effect on the Future Sewer Service Area for MSA or any municipalities served by it, absent NJDEP approval of an amendment or revision, as appropriate, to the relevant WMP.
- Water's Edge/Moosepac STP (NJPDES NJ0081086; DGW) – This SSA serves a small area in the northeast portion of the Township around Moosepac Pond in the Highlands Preservation Area. Note: Jefferson Township intends to eliminate the



Water's Edge/Moosepac STP and include its service area in the White Rock Lake STP service area.

- White Rock Lake STP (NJPDES NJ0026867; DSW) – This SSA serves a small area in the northeast portion of the Township around White Rock Lake in the Highlands Preservation Area.

The following represent smaller defined service areas within Jefferson Township. These facilities have an associated facilities table in Appendix C.

- Arthur Stanlick School (NJPDES NJ0021105; DSW) – This small SSA serves the Arthur Stanlick School located off of East Shawnee Trail just east of Route 15.
- Berkshire Valley Golf Course (NJPDES NJ0141445; DGW) – This small SSA serves the Berkshire Valley Golf Course located off of Cozy Lake Road and just west of Green Pond.
- Casa Bianca Restaurant (NJPDES NJG0136379; T1) – This small SSA serves the Casa Bianca Restaurant located off of Berkshire Valley Road just southwest of the Green Valley Shopping Center Golf Course.
- Ellen T. Briggs School (NJPDES NJG0102741; T1) – This small SSA serves the Ellen T. Briggs School located off of Jefferson Drive just east of Espanong Road.
- Green Valley Shopping Center (NJPDES NJG0128830; T1) – This small SSA serves the Green Valley Shopping Center located off of Berkshire Valley Road.
- Highlander View Apartments (NJPDES Not Issued yet; DGW) – This small SSA is proposed to serve the Highlander View Apartments located immediately south of the Rt. 15 Properties On-Site Facility which is split by Hellers Lane off of Route 15.
- Jefferson Gardens (Jefferson Garden; NJPDES NJG0108570; T1) – This small SSA serves the Jefferson Gardens located off of Route 15 just south of Edison Road.
- Jefferson Hills Garden Apartments (NJPDES NJG0142808; T1) – This small SSA serves the Jefferson Hills Garden Apartments off of Bigelow Road just south of Route 23.
- Jefferson House Restaurant (NJPDES NJG0156973; T1) – This small SSA serves the Jefferson House Restaurant located in the western portion of the Township adjacent to Lake Hopatcong just north of Great Cove.



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- Jefferson Township High-Middle School (NJPDES NJ0021091; DSW) – This small SSA serves the Jefferson Township High and Middle School located at the off of Weldon Road on the north east side of Mahlon Dickerson Reservation.
  - Jefferson Village Square (NJPDES NJ0089028; DGW) – This small SSA serves the Jefferson Village Square located at the intersection of Route 15 South & Franklin Street.
  - Jefferson Village WTP (NJPDES NJ0133558; DGW) – This small SSA serves the Jefferson Village located on Harold Road, which is off of Mase Road.
  - Lakeside Shopping Center (NJPDES NJG0106968; T1) – This small SSA serves the Lakeside Shopping Center located in the western portion of the Township between the northbound and southbound portions of Route 15 on Bowling Green Parkway.
  - Mahlon Dickerson Reservation (NJPDES NJG0188255; T1) – This small SSA serves 5 small facilities in this Morris County Park Commission property.
  - McDonalds Restaurant (NJPDES NJ0147575; DGW) – This small SSA serves the McDonalds Restaurant located between the northbound and southbound lanes of Route 15 at the intersection with Edison Road.
  - New Orleans Steak House (NJPDES NJG0129551; T1) – This small SSA serves the New Orleans Steak House located between the northbound and southbound lanes of Route 15 at the intersection with Berkshire Valley Road.
  - Oak Mobile Home Park (NJPDES NJG0159930; T1) – This small SSA serves the Oak Mobile Home Park located off of Milton Road just east of the Bowling Green Golf and Tennis Club.
  - Olympus Gym (NJPDES NJG0140007; T1) – This small SSA serves the Olympus Gym located off of Route 15 just south of Edison Road.
  - Pathmark Supermarket (NJPDES NJ0108243; DGW) – This small SSA serves the Pathmark Supermarket located in the western portion of the Township between the northbound and southbound portions of Route 15 just north of its intersection with Edison Road.
  - Rt. 15 Properties On-Site Facility (NJPDES not issued yet; DGW) – This small SSA will serve a retail building, restaurant, warehouse and gas station. It is located immediately north of the Highlander View Apartments off of Route 15 on Hellers Lane.
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- RLM Development Corp. (NJPDES NJG0107832; T1) – This small SSA serves the RLM Development Corp. located in the western portion of the Township just off of Route 15 just north of Swan Lane.
- Sandy Point Mobile Home Park (NJPDES NJ0068331; DGW) – This small SSA serves the Sandy Point Mobile Home Park located off of Wild Way just west of Espanong Road.
- San Bar Mobile Home Park (NJPDES NJG0168491; T1) – This small SSA serves the San Bar Mobile Home Park located off of San Bar Drive just east of Lake Hopatcong's Great Cove.
- Seneca Garden Apartments (NJPDES NJ0065820; DGW) – This small SSA serves the Seneca Garden Apartments located off of Route 15 & Cella Street.
- Sonny's Restaurant & 8 Apts. (NJPDES NJG0128350; T1) – This small SSA serves the Sonny's Restaurant and the associated apartments located off of Moquis Trail just west of Berkshire Valley Road.
- The Windlass Restaurant (NJPDES NJG0237566; T1) - This small SSA serves the Windlass Restaurant on Lake Hopatcong.
- Viana Associates Inc. (NJPDES NJG0188395; T1) – The facility consists of three office/retail buildings. It is located off of Route 15 and west of Hellers Lane.
- Wendy's Restaurant (NJPDES NJG0142727; T1) – This small SSA serves the Wendy's Restaurant located at the intersection of Route 15 and Edison Road.
- Willow Lake Day Camp (NJPDES NJG0103284; T1) – This small SSA serves the Willow Lake Day Camp located in the western portion of the Township just off of Route 181 just north of the northeast corner of Lake Hopatcong.

## **General Service Area**

General Service Areas (GSAs) consist of those areas with discharges to groundwater of less than 2,000 gallons per day (i.e. residential septic systems) that are neither designated for sewer service nor as non-discharge areas.

## **Coordination and Compliance with the New Jersey Highlands Regional Master Plan**

88% of Jefferson Township is located in the Highlands Preservation Area and the remaining 12% is located in the Highlands Planning Area. As of March 19, 2014, the Township of Jefferson has not chosen to conform to the Highlands Regional Master Plan for the Planning



Area. Therefore, the standards in the NJDEP Water Quality Management Rules, N.J.A.C. 7:15-1 et seq., were utilized for the Township within the Planning Area.

## **Significant Actions**

The Township currently operates two wastewater treatment plants that are located in close proximity to each other; Water's Edge/Moosepac and White Rock Lake Treatment Plants. It is the intent of the Township to eliminate the Moosepac Treatment Plant and pump all wastewater from this service area to the White Rock Lake Facility. The White Rock Lake facility currently has enough capacity to accept the flow from Moosepac without expanding. Both of these STP's are located in the Preservation Area and are subject to NJDEP Highlands Regulations and conformance with the Highlands Regional Master Plan.

## **Future Wastewater Demand and Facilities**

For the purposes of evaluating capacity and future sanitary flow rates, full build-out of undeveloped or underdeveloped land in the Highlands Planning Area portion of the Township was evaluated based on the zoning and development potential of land parcels within the Township. Build-out calculations were performed for major wastewater treatment facilities and were not required for the minor facilities listed in Table 1a and 1b above.

Finally, it is noted that Musconetcong Sewage Authority's (MSA) NPDES Permit No. NJ0027821 has two different flows upon which its discharge limitations were based. At this time, the 4.31 MGD flow is operative. However, MSA has received NJDEP approval for an increase to 5.79 MGD when the permittee complies with Part IV, E.2.a of the Final Permit issued on December 1, 2011. However, an increase in flow to 5.79 MGD shall have no effect on the Future Sewer Service Area for MSA or any municipalities served by it, absent NJDEP approval of an amendment or revision, as appropriate, to the relevant WMP.

## **Sewer Service Area Wastewater Capacity Analysis**

Table 2a presents the results of the Build-out Analysis within the SSAs indicated above after the Moosepac/Water's Edge STP is closed all flow has been conveyed to White Rock Lake STP.

**Table 2a: Jefferson Township Build-out Table (SSAs)**

<b>Major Public Wastewater Treatment Facility</b>	<b>Certified Need (mgd)</b>	<b>Total Existing Flow (mgd)</b>	<b>Total Flow Attributed to TWAs Approved But Unconnected (mgd)</b>	<b>Residential Build-out Flow (mgd)</b>	<b>Non-Residential Build-out Flow (mgd)</b>	<b>Existing Septic Systems Flow (mgd)</b>	<b>Total Projected Build-out Flow (mgd)</b>	<b>Remaining Capacity (mgd)</b>
Musconetcong STP	0.860 <sup>2</sup>	0.000	0	0.0294	0.02164	0.771	0.822	0.038
<b>Major Public Wastewater Treatment Facility</b>	<b>Permitted Capacity (mgd)</b>	<b>Total Existing Flow (mgd)</b>	<b>Total Flow Attributed to TWAs Approved But Unconnected (mgd)</b>	<b>Residential Build-out Flow (mgd)</b>	<b>Non-Residential Build-out Flow (mgd)</b>	<b>Existing Septic Systems Flow (mgd)</b>	<b>Total Projected Build-out Flow (mgd)</b>	<b>Remaining Capacity (mgd)</b>
White Rock Lake STP <sup>1</sup>	0.1295	0.1244 <sup>3</sup>	0	0	0.00069	0.0006	0.1257	0.0038

<sup>1</sup> Build-out was calculated by the Highlands Council since the sewer service area is in Highlands Preservation Area. Build-out is for the existing White Rock Lake SSA. All flows from Moosepac STP/Water's Edge have been combined with the White Rock Lake STP in this table.

<sup>2</sup> The certified need for Jefferson Twp will be calculated from the Discharge Allocation Certificate (DAC) of 1.48 mgd for MSA. The allocated certified need for Jefferson Twp is 0.860 mgd.

<sup>3</sup> This is the 12 month annual average for both Moosepac STP (43,790 gpd) and White Rock Lake STP (80,600 gpd), period ending May 2013.

**NOTE:** The certified need identified in this document are neither NJDEP-determined nor NJDEP enforced. They are used entirely by MSA and its member communities.



Treatment Works Approvals (TWAs) approved by NJDEP for unconnected projects within Jefferson Township consist of the following:

**Table 2b – Treatment Works Approvals**

<b>TWA</b>	<b>Facility</b>	<b>Unconnected Flow (mgd)</b>
None		0
<b>Total</b>		0

The portion of Jefferson Township designated as SSA to the Musconetcong STP as shown on Map3M “Future Wastewater Service Area” is proposed to ultimately be served by this wastewater treatment facility. The capacity of the Musconetcong STP is shown in the Facility Table in Appendix C. Table 2a shows that the Musconetcong STP has sufficient future wastewater capacity to match the expected build-out potential associated with the MSA STP SSA within the Township.

Jefferson Township currently operates two wastewater treatment plants that are located in close proximity to each other; Water’s Edge/ Moosepac STP and White Rock Lake STP. It is the intent of the Township to eliminate the Moosepac STP and pump all wastewater from this service area to the White Rock Lake STP. The combined permitted capacity for the two facilities is 0.1295 mgd and the combined total projected build-out flow is 0.1263 mgd leaving a surplus in capacity of 0.0032 mgd. Table 2a shows Jefferson Township has sufficient allocated capacity to allow Moosepac STP to combine with the White Rock STP. Both of these STP’s are located in the Preservation Area and are subject to NJDEP Highlands Regulations and conformance with the Highlands Regional Master Plan.

Flows for the additional minor facilities in the municipality are anticipated to remain the same through at least the term of this WMP.

### **General Service Area Wastewater Capacity Analysis**

Table 3 presents the results of the Build-out Analysis within the GSA for the portion of the Township that is located in the Highlands Planning Area only. GSAs in the Highlands Preservation Area were not evaluated. The GSA is shown on Map 3M.

The breakdown by HUC14 subwatershed is shown below.



Table 3 - Jefferson Township Build-out by HUC14 (GSA)

HUC14 <sup>1</sup>	Build-out Potential (Equivalent Dwelling Units)		Surplus/ Deficit
	Using Nitrate Dilution Model	Under Municipal Zoning	
02030103030040	24.15	3.00	21.15
02030103030060	18.36	0.00	18.36
02030103030070	0.04	0.00	0.04
02040105150020	31.99	11.80	20.19

<sup>1</sup> The Build-out potential within this HUC 14 is for that portion within the municipal boundary. It does not represent the entire HUC 14 boundary within Morris County and only represents the portion of the HUC14 within Jefferson Township. GSAs in the Highlands Preservation Area were not evaluated.

For Table 3, equivalent dwelling units were calculated by adding [potential residential flow (gpd)/350] + [potential non-residential flow (gpd)/500].

The General Service Area (i.e., septic) build-out capacity analysis for Jefferson Township was based on the 2.0 mg/L statewide standard for the target concentration of nitrate in groundwater. The Nitrate Dilution Model was only run for areas in the Highlands Planning Area.

Following are the results of this analysis shown in table 3 for Jefferson Township's portion of the HUC14:

- For HUC 02040105150020 the build-out results based on existing zoning is less than the number of potential EDUs generated by the Nitrate Dilution Model (NDM) for septic capacity, and therefore, no change in zoning is required.
- For HUC 02030103030040, the build-out results based on existing zoning is less than the number of potential EDUs generated by the Nitrate Dilution Model (NDM) for septic capacity, and therefore, no change in zoning is required.
- For HUCs 02030103030060 and 02030103030070 do not have any build-out for municipal zoning, therefore there is sufficient nitrate dilution.

NOTE: Where the number of EDUs generated by zoning is greater than the number of EDUs generated by the NDM, zoning build-out and NDM will be run for the entire HUC 14 to determine if the entire HUC 14 has sufficient nitrate dilution capacity to accommodate full zoning build-out.

## Lake Hopatcong Restoration Plan for Jefferson Township

The NJDEP has recognized that Lake Hopatcong is impaired for excessive in-lake total phosphorus (TP) originating from high phosphorus loads. This propagated the need for the development of a Restoration Plan for the lake. In June 2006, "A Refined Phosphorus TMDL and Restoration Plans for Lake Hopatcong and Lake Musconetcong, Upper Musconetcong River Watershed, Morris and Sussex Counties, New Jersey" was finalized. Based on this TMDL, "the existing TP load must be reduced by 41% to achieve the targeted TP loads as outlined in the State's TMDL."<sup>1</sup> Jefferson Township agreed to implement a septic maintenance plan in the Township as its way of reducing phosphorus for Lake Hopatcong.

Hence, areas surrounding Lake Hopatcong, in Jefferson Township are currently part of a septic maintenance program as indicated by the above mentioned TMDL.

## Water Supply Demand

**Table 4 – Jefferson Township Water Supply Demand by PWSID & SSA in the Highlands Planning Area**

PWSID	Permitted Water Allocation (MGM)	Water Purveyor Name	Wastewater Facility/Type	Incremental Water Demand (gpd)
NA	NA	NA	GSA	960
			Musconetcong Sewerage Authority	23,111
1414009	NA	Mountain Shore Water Supply	Musconetcong Sewerage Authority	320
1414011	21	Lake Hopatcong (Jefferson Township)	GSA	5,453
			Musconetcong Sewerage Authority	34,978

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<sup>1</sup> As per the "Refined Phosphorus TMDL and Restoration Plans for Lake Hopatcong and Lake Musconetcong, Upper Musconetcong River Watershed, Morris and Sussex Counties, New Jersey", June 2006.

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For **Table 4** incremental water demand was calculated by adding [potential residential EDU's \* 320 (gpd)] + [potential non-residential square footage \* 0.125 (gpd)].

"Pursuant to N.J.A.C. 7:15-5.25(f), a water supply analysis is required to demonstrate that the water supply needs associated with existing and future development do not conflict with the current New Jersey State Water Supply Plan. The current New Jersey State Water Supply Plan was adopted in August 1996.

Insufficient water supply information is available at this time to make any firm determinations on the sufficiency of water supply. This evaluation will be updated as individual municipal chapters are adopted. However, based on the information in Table 4 above, there is no information indicating that there is a shortage of water supply. Further, there are no significant water supply issues identified in the current State Water Supply Plan for the planning areas impacting Morris County."<sup>2</sup>

## Water Supply Demand in the Highlands Preservation Area

"The Highlands Council estimates from the build out a total public water demand for the Jefferson Township Water Utility Milton System of 0.000863 MGD in the Preservation Area, which does exceed the utility capacity conditions. There is no public water demand from the build-out for the other facilities serving within Jefferson Township in the Preservation Area. "<sup>3</sup>

## Water Use and Conservation Management Plan

There are three deficit HUC 14 subwatersheds within Jefferson Township according to the Highlands Regional Master Plan (2008) Net Water Availability (NWA) analysis. The primary purpose of a Highlands Water Use and Conservation Management Plan (WUCMP) is to reduce and where feasible eliminate deficits in subwatersheds where water use was determined to exceed its availability, and therefore deemed to be in deficit. The WUCMP can identify appropriate management strategies that can help ameliorate such water deficits or potential impacts on water supply source areas. There are many water conservation strategies that may support deficit reduction including water system leak detection and reduction, meter calibration or replacement, outdoor water use reduction and enhanced stormwater recharge to name a few. The Highlands Council intends to work directly with Jefferson Township in the formation of the municipal specific WUMCP that all parties agree with. <sup>3</sup>

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<sup>2</sup> As indicated by the NJDEP.

<sup>3</sup> As indicated by the Highlands Council

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Jefferson Township  
Map 2M : Existing Sewered Areas (SSA)



Amending the Following Areawide Water Quality Management Plans:  
Northeast, Upper Delaware, Upper Raritan, Sussex County

Legend

- Wastewater Management Planning Area
- Municipal Boundaries
- Pump Stations
- Major Trunk Lines
- Septic Systems
- Parcels
- Service Area of Wastewater Facilities with Planning Flows  
Less than 2,000 gpd which discharge to groundwater

Existing DSW (Discharge to Surface Water)

- Existing DSW

Existing DGW (Discharge to Groundwater)

- Existing DGW

Existing Parcels Served by Sewer

- Jefferson Twp High-Middle School - NJ0021091
- Arthur Stanlick School - NJ0021105
- White Rock STP - NJ0026867
- The Windlass Restaurant - NJG0237566
- Seneca Garden Apartments - NJ0065820
- Sandy Point Mobile Home Park - NJ0068331
- Water's Edge/ Moosepac STP - NJ0081086
- Jefferson Village Square - NJ0089028
- Pathmark Supermarket - NJ0108243
- Jefferson Village WTP - NJ0133558
- Berkshire Valley Golf Course - NJ0141445
- McDonalds Restaurant - NJ0147575
- Ellen T Briggs School - NJG0102741
- Willow Lake Day Camp - NJG0103284
- Lakeside Shopping Center - NJG0106968
- RLM Development Corp - NJG0107832
- Jefferson Gardens - NJG0108570
- Sonny's Restaurant & 8 Apartments - NJG0128350
- Green Valley Shopping Center - NJG0128830
- New Orleans Steak House - NJG0129551
- Casa Bianca Restaurant - NJG0136379
- Olympus Gym - NJG0140007
- Wendy's Restaurant - NJG0142727
- Jefferson Hills Garden Apts - NJG0142808
- Jefferson House Restaurant - NJG0156973
- Oak Mobile Home Park - NJG0159930
- San-Bar Mobile Home Park - NJG0168491
- Mahlon Dickerson Reservation - NJG0188255
- Viana Associates Inc. - NJG0188395

Jefferson Township is located in both the Highlands Planning and Preservation Areas.

Data Sources:

- NJ Department of Environmental Protection
- NJPDES Surface Water Discharges in New Jersey (Existing DSWs)
- NJPDES Regulated Discharge to Groundwater Facility Locations (Existing DGWs)
- Morris County
- Wastewater Management Planning Area
- Municipal Boundaries
- Parcel Boundaries
- Major Roads (Labels)
- Existing Parcels Served by Sewer \*\*
- Service Area of Wastewater Facilities with Planning Flows Less than 2,000 gpd which discharge to groundwater \*\*
- Septic Systems \*\*
- Pump Stations \*\*
- Major Trunk Lines \*\*

\*\* Data contains municipal input and quality control

Passaic County

Sussex County

Rockaway Township

Existing DSW (Discharge to Surface Water Facilities)

Map No.	Facility Name	NJPDES Permit No.
1	JEFFERSON TWP HIGH-MIDDLE SCHOOL	NJ0021091
2	ARTHUR STANLICK SCHOOL	NJ0021105
3	WHITE ROCK STP	NJ0026867

Existing DGW (Discharge to Groundwater Facilities)

Map No.	Facility Name	NJPDES Permit No.
1	SENECA GARDEN APARTMENTS	NJ0065820
2	SANDY POINT MOBILE HOME PARK	NJ0068331
3	JEFFERSON VILLAGE SQUARE	NJ0089028
4	MAHLON DICKERSON RESERVATION	NJG0188255
5	PATHMARK SUPERMARKET	NJ0108243
6	JEFFERSON VILLAGE WTP	NJ0133558
7	BERKSHIRE VALLEY GOLF COURSE	NJ0141445
8	MCDONALDS RESTAURANT	NJ0147575
9	WATERS EDGE / MOOSEPAC	NJ0081086
10	NEW ORLEANS STEAK HOUSE	NJG0129551
11	CASA BIANCA RESTAURANT	NJG0136379
12	SAN-BAR MOBILE HOME PARK	NJG0168491
13	OAK MOBILE HOME PARK	NJG0159930
14	SONNY'S RESTAURANT & 8 APARTMENTS	NJG0128350
15	JEFFERSON GARDENS	NJG0108570
16	LAKESIDE SHOPPING CENTER	NJG0106968
17	OLYMPUS GYM	NJG0140007
18	JEFFERSON HOUSE RESTURANT	NJG0156973
19	WENDY'S RESTAURANT	NJG0142727
20	WILLOW LAKE DAY CAMP	NJG0103284
21	JEFFERSON HILLS GARDEN APTS	NJG0142808
22	ELLEN T BRIGGS SCHOOL	NJG0102741
23	RLM DEVELOPMENT CORP	NJG0107832
24	GREEN VALLEY SHOPPING CENTER	NJG0128830
25	VIANA ASSOCIATES INC.	NJG0188395
26	THE WINDLASS RESTAURANT	NJG0237566

Notes:

Pursuant to N.J.A.C. 7:15, Riparian zones are: 300 feet from top of bank (or centerline of a first order stream where no bank is apparent) for waters designated as Category One and all upstream tributaries within the same HUC 14; 150 feet for waters designated Trout Production and all upstream waters; 150 feet for water designated Trout Maintenance and all upstream waters within one linear mile as measured along the length of the regulated water; 150 feet for any segments of water flowing through an area that contains documented habitat for a threatened or endangered species of plant or animal, which is critically dependent on the surface water body for survival, and all upstream waters (including tributaries) within one linear mile as measured along the length of the surface water body; 150 feet for waters that run through acid-producing soils, and; 50 feet for all waters not designated as C1, trout waters, critically water dependent Threatened and/or Endangered Species Habitat, or associated with acid soils.

Surface waters that are designated Category One are listed in the Surface Water Quality Standards at N.J.A.C. 7:9B. The Department's "Surface Water Quality Standards" GIS data layer was utilized to determine these waters. The applicable 300 foot buffer has been applied to these waterways and removed from the proposed sewer service areas on the mapping. Lesser width buffers have not been graphically removed from the sewer service area but are not proposed for sewer service. Jurisdictional determinations by the Department will be utilized to determine the extent of the sewer service area on individual lots.

All existing, new, or expanded industrial pretreatment facilities requiring Significant Indirect User (SIU) permits and/or Treatment Works Approvals, and which are located within the specified sewer service area, are deemed to be consistent.

Pre-existing grant conditions and requirements (from Federal and State grants or loans for sewerage facilities) which provide for restriction of sewer service to environmentally sensitive areas, are unaffected by adoption of this document and compliance is required.

Development in areas mapped as wetlands, flood prone areas, suitable habitat for endangered and threatened species as identified on the Department's Landscape Maps of Habitat for Endangered, Threatened and Other Priority Wildlife as Rank 3, 4, and 5, Natural Heritage Priority Sites, riparian zones, steep slopes, or designated river areas may be subject to special regulation under Federal or State statutes or rules, and interested persons should check with the Department for the latest information. Any depiction of environmental features shall be for general information purposes only, and shall not be construed to define the legal geographic jurisdiction of such statutes or rules.

Areas located within the watershed of a Freshwater One (FW1) stream, as classified in the Surface Water Quality Standards, and/or that have Class 1-A ground water (Ground Water of Special Ecological Significance), as classified in the Ground Water Quality Standards, are identified as "Non-degradation water area based on the Surface Water Quality Standards at N.J.A.C. 7:9B, and/or the Ground Water Quality Standards at N.J.A.C. 7:9-9". Non-degradation water areas shall be maintained in their natural state (set aside for posterity) and are subject to restrictions including, but not limited to, the following: 1) DEP will not approve any pollutant discharge to ground water nor approve any human activity which results in a degradation of natural quality except for the upgrade or continued operation of existing facilities serving existing development. For additional information please see the Surface Water Quality Standards at N.J.A.C. 7:9B, and/or the Ground Water Quality Standards at N.J.A.C. 7:9-6.

All areas not mapped as sewer service areas default to the service area of wastewater facilities with planning flows less than 2,000 gpd which discharge to groundwater.

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

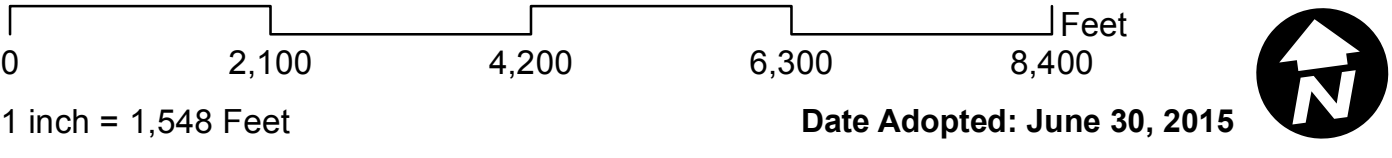
Municipal Locator



Submitted By:  
Christine Marion, Planning Director  
on behalf of the Morris County Board of Chosen Freeholders as  
Wastewater Management Planning Agency  
P.O. Box 900, Morristown, NJ 07963  
http://www.morrisplanning.org/wastewater.asp | Telephone: (973) 829-8120



Jefferson Township  
Map 3M : Future Wastewater Service Area



Amending the Following Areawide Water Quality Management Plans:  
Northeast, Upper Delaware, Upper Raritan, Sussex County

- Legend**
- Wastewater Management Planning Area
  - Municipal Boundaries
  - Pump Stations
  - Major Trunk Lines
  - Lakes/Ponds
  - Parcels
  - Areas to be served by individual subsurface sewage disposal systems with planning flows 2,000 gpd or less (ISSDS)
- Existing/Proposed DGW (Discharge to Groundwater)**
- Existing DGW
- Existing DSW (Discharge to Surface Water)**
- Existing DSW
- Future Sewer Service Areas**
- Arthur Stanlick School
  - Berkshire Valley Golf Course
  - Casa Bianca Restaurant
  - Ellen T Briggs School
  - Green Valley Shopping Center
  - Highlander View Apartments
  - Jefferson Gardens
  - Jefferson Hills Garden Apts
  - Jefferson House Restaurant
  - Jefferson Twp High-Middle School
  - Jefferson Village Square
  - Jefferson Village WTP
  - Lakeside Shopping Center
  - Mahlon Dickerson Reservation
  - McDonalds
  - Musconetcong STP
  - New Orleans Steak House
  - Oak Mobile Home Park
  - Olympus Gym
  - Pathmark Supermarket
  - Rt. 15 On-Site Facility
  - RLM Development Corp
  - San-Bar Mobile Home Park
  - Sandy Point Mobile Home Park
  - Seneca Garden Apartments
  - Sonny's Restaurant & 8 Apts
  - Viana Associates Inc.
  - Wendy's Restaurant
  - White Rock Lake STP
  - Willow Lake Day Camp

**Data Sources:**

NJ Department of Environmental Protection

- NJPDES Surface Water Discharges in New Jersey, (Existing DSWs)
- NJPDES Regulated Discharge to Groundwater Facility Locations (Existing/Proposed DGWs)
- Lakes/Ponds

**Morris County**

- Wastewater Management Planning Area
- Municipal Boundaries
- Parcel Boundaries
- Major Roads (Labels)
- Future Sewer Service Area \*\*
- Areas to be served by individual subsurface sewage disposal systems with planning flows 2,000 gpd or less (ISSDS) \*\*
- Pump Stations \*\*
- Major Truck Lines \*\*

\*\* Data contains municipal input and quality control

Jefferson Township is located in both the Highlands Planning and Preservation Areas.

Passaic County

Sussex County

Rockaway Township

Mount Arlington Borough

Roxbury Township

Existing DSW (Discharge to Surface Water Facilities)		
Map No.	Facility Name	NJPDES Permit No.
1	JEFFERSON TWP HIGH-MIDDLE SCHOOL	NJ0021091
2	ARTHUR STANLICK SCHOOL	NJ0021105
3	WHITE ROCK STP	NJ0026867
4	MUSCONETCONG SEWERAGE AUTHORITY	NJ0027821

Existing/Proposed DGW (Discharge to Groundwater Facilities)		
Map No.	Facility Name	NJPDES Permit No.
1	SENECA GARDEN APARTMENTS	NJ0065820
2	SANDY POINT MOBILE HOME PARK	NJ0068331
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20	WILLOW LAKE DAY CAMP	NJG0103284
21	JEFFERSON HILLS GARDEN APTS	NJG0142808
22	ELLEN T BRIGGS SCHOOL	NJG0102741
23	RLM DEVELOPMENT CORP	NJG0107832
24	VIANA ASSOCIATES INC	NJG0188395
25	HIGHLANDER VIEW APARTMENTS	Proposed DGW
26	RT. 15 PROPERTIES ON-SITE FACILITY	Proposed DGW
27	THE WINDLASS RESTAURANT	NJG0237566

**Notes:**

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Municipal Locator



Submitted By:  
Christine Marion, Planning Director  
on behalf of the Morris County Board of Chosen Freeholders as  
Wastewater Management Planning Agency  
P.O. Box 900, Morristown, NJ 07963  
<http://www.morrisplanning.org/wastewater.asp> | Telephone: (973) 829-8120



Jefferson Township  
Map 4M : Municipal Zoning

0 2,100 4,200 6,300 8,400 Feet  
1 inch = 1,548 Feet



Date Adopted:

Amending the Following Areawide Water Quality Management Plans:  
Northeast, Upper Delaware, Upper Raritan, Sussex County

Data Sources:  
NJ Department of Environmental Protection  
- Lakes/Ponds, Rivers/Streams, NDEP SWQS

Morris County  
- Wastewater Management Planning Area  
- Municipal Boundaries  
- Parcel Boundaries  
- Major Roads (Labels)  
- Existing Zoning/Overlay Zones\*\*

\*\* Data contains municipal input and quality control

Legend

- Wastewater Management Planning Area
- Parcels
- Lakes/Ponds
- Rivers/Streams
- Overlay Zoning
- Existing Zoning

Passaic County

Sussex County

Rockaway Township

Mount Arlington Borough

Roxbury Township

Zoning Definitions

- ASCH - Affordable Senior Citizen Housing District
- C-1 - Neighborhood Business
- C-2 - Highway Business
- CR - Commercial Recreation Zone
- IP - Industrial Park
- O - Office & Professional
- PARC - Planned Adult Residential Community
- Q - Quarry/Overlay
- R-10 - High Density Residential
- R-30 - Medium Density Residential
- R-30 - Medium Density Residential
- R-40 - Low Density Residential
- RC - Rural Conservation
- SR-1 - Medium Density Residential
- SR-2 - High Density Residential

Municipal Locator



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