# VIII. Wastewater Facilities by Municipality: <u>Hardyston Township</u>

2010 Population = 8,213 Land Area = 32.09 square miles

2010 Population Density = 256 persons/sq. mile

Hardyston Township contains both Highlands Preservation Area (eastern portion of Township) and Highlands Planning Area.

This is an element of the Sussex County Wastewater Management Plan prepared by Sussex County Planning Division in accordance with N.J.A.C. 7:15.

## **Existing and Proposed Wastewater Infrastructure**

Wastewater facilities that discharge greater than 2,000 gallons per day are regulated by NJ Dept. of Environmental Protection. A discharge to groundwater facility is regulated with either a General (T-1) Permit or an individual New Jersey Pollutant Discharge Elimination System (NJPDES) Permit, and a discharge to surface water is regulated with an individual New Jersey Pollutant Discharge Elimination System (NJPDES) Permit.

The following table lists facilities governed by a T-1 Permit, which is a "General Permit for Sanitary Subsurface Disposal" for discharges greater than 2,000 gallons per day.

Table A - Existing NJPDES T-1 Facilities:

NJPDES	Facility Name	Project Summary	Block	Lot	Street Address	X Coord.	Y Coord.
NJG0084778	Beaver Hill Campground	139 campsites, bath houses, laundry, RV hookups	71	10.02	57-79 Big Spring Road	483019	838275
NJG0156566	Hardyston Plaza North	Strip mall with 51,000 sq.ft. retail, 6 apts.	64	8.05	127 Route 23	469289	848537
NJG0171239	Lake Gerard	Lake community with 87 homes, common land owner	60	17	Route 23, Stockholm area	480434	827822
NJG0221805	Milano's Restaurant	Restaurant			3673 Rt. 94	476500	850010

The regional wastewater treatment facility owned and operated by the Sussex County Municipal Utilities Authority (SCMUA) is located in Hardyston Twp. The Upper Wallkill Water Pollution Control Facility has a surface water discharge to the Wallkill River. Hardyston Twp. has a Municipal Utilities Authority, and a wastewater collection system with 8 pump stations that conveys wastewater flow to the Upper Wallkill SCMUA facility.

## **Build-out and Sewer Capacity Analysis**

**Table B** provides a breakdown of the acreage of land available for development in the Highlands Planning Area within each general zone of the municipality, based on the DEP Model for build-out analysis. There is no DEP formula for projecting industrial flows, so they can be forecast in the future when there is a basis for projecting industrial flows. The DEP Model is a regional model, and build-out projections can be further refined with local input.

Zone	Developable Area (Acres)	Square Feet (commercial)	Res. Density (Units per Acre)	Total Res. Units		
Commercial Recreation (CR)	230			1,056 (based on Twp. approval)		
Commercial Recreation (Village Center)	34.4	391,920 sq.ft (based on Twp. approval)				
Medium Density Residential (R-4)	51.6	, , ,	4.5	232		
Minimum Impact Development 3 (MIDD-3)	39.5		0.3	12		
Min. Impact Development 5 (MIDD-5)	0		0.2	0		
Neighborhood Commercial (B-1)	13.7	FAR = 0.2 119,355 sq. ft				
Residential Commercial (RC)	2.4					
Town Center Shopping District (TC-SCD)	39.9	FAR = 0.25 434,510 sq.ft.				
Limited Industrial (I-1)	0.7	FAR = 0.25 7,623 sq.ft.				
Medium Industrial (I-2)	139.6	FAR = 0.25 1,520,000 sq.ft.				
TOTAL	552 acres	945,785 sq.ft. Comm. 1,527,620 sq.ft. Indus.		1,300 units		

Projected Flow: New res. units at build-out = 1,300 x 300 GPD/unit = 390,000 GPD additional flow

New commercial sq.ft. = 945,785 sq.ft. x 0.1 GPD/sq.ft. = 94,579 GPD additnl.flow

New industrial sq.ft. = 1.527 Mil. Sq.ft. [Wastewater flow to be determined]

No DEP formula available

	Table B - Future Wastewater Planning Flows By Facility Hardyston Township								
Domestic Wastewater Treatment Facility and NJPDES Permit Number	SCMUA Allocation (MGD)	Existing Flows (MGD) 2014 – April 2015	Approved TWA Permits/ Committed Flow (MGD)	Projected Residential Dwelling Units	Projected Residential Flow (MGD)	Projected Nonresidential Space (sq ft)	Projected Nonresidential Flow (MGD)	Total Future Planning Flows (MGD)	(Deficit) Wastewater Allocation (MGD)
Sussex County MUA	0.607	0.294		1,300	0.390	945,785 Comm. 1.527 Mil Indus.	0.0946 +Industr.	0.8906 +Industr.	(.291) +Industr.

The build-out analysis shows a "wastewater capacity deficit" being identified for future development. The build-out analysis is based on existing zoning, but has no timeframe attached to it. The County Wastewater Management Plan is a 20-year plan. Municipal officials can realistically assess the pace of growth that is occurring and whether additional sewer capacity and infrastructure would be needed during the next 20 years.

For municipalities served by the SCMUA regional system, one option is to purchase and transfer additional allocation from another participating municipality, if it is available. This future need has been anticipated by Hardyston Township, the Twp. Municipal Utilities Authority, and an active local developer, Crystal Springs. To address the projected wastewater allocation deficit of almost 300,000 gallons per day, a future Plan Amendment has been discussed locally for an expansion of the SCMUA treatment facility and increased discharge to groundwater. A hydrogeological study has been initiated to identify suitable locations for a future discharge to ground water of approximately 300,000 gallon per day.

## **Hardyston Township Municipal Chapter - Wastewater Facilities Tables**

The wastewater facility tables for all sanitary and/or process wastewater discharge to surface water facilities and those sanitary/ and/or process wastewater discharge to groundwater facilities discharging greater than 2000 gallons per day (i.e., requiring NJPDES permits) are listed below, based on whether they are domestic or industrial wastewater treatment facilities, and whether they have service areas that affect more than one municipality. The wastewater discharges are listed in Million Gallons per Day (MGD).

**Domestic Wastewater Facilities With Sewer Service Areas in Multiple Municipalities** – The SCMUA facility is located in Hardyston and listed in the following tables.

On-Site Domestic Treatment Facilities - These facilities are listed in the following Tables.

Industrial Wastewater Facilities – These facilities are listed in following Tables.

#### **ON-SITE DOMESTIC TREATMENT FACILITIES FACILITY NAME; BALLYOWEN GOLF CLUB** 1. Existing or proposed facility: Existing 2. New Jersey Pollutant Discharge Elimination NJ0138720 System Permit Number: 3. Discharge to ground water (DGW) or surface DGW water (DSW): 4. Receiving water or aquifer: Allentown Formation Geology 5. Classification of receiving water or aquifer: 6. Owner of facility: Ballyowen Golf Club USA Inc. 7. Operator of facility: 8. Co-Permittee of facility (where applicable): 9. Location of facility: a. Municipality & County Hardyston Township – Sussex County b. Street address 105 Wheatsworth Road c. Block(s) and Lot(s) 10. Location of discharge (i.e. degrees, minutes, a. Longitude seconds): b. Latitude \_\_ or c. State Plane Coordinates X- 463435 Y- 838961 11. Present permitted flow or permit condition MGD (DSW) or daily maximum (DGW): \*13. Summary of population served/to be served Current (Year 2015) Build-out including major seasonal fluctuations: Population Population Total \*14. Summary of wastewater flow received/to be Current (Year 2015) Flow **Build-out Flow** received as a 3-day average flow for DSW or a (in MGD) (in MGD) daily maximum flow for DGW: Residential flow Commercial flow Industrial flow Infiltration/Inflow **Facility Total** 0.0019 MGD 0.004 MGD

#### **ON-SITE DOMESTIC TREATMENT FACILITIES** FACILITY NAME: CHRISTIAN FAITH FELLOWSHIP CHURCH 1. Existing or proposed facility: Existing 2. New Jersey Pollutant Discharge Elimination NJ0157007 System Permit Number: 3. Discharge to ground water (DGW) or surface DGW water (DSW): 4. Receiving water or aquifer: Mixed Gneiss Geology 5. Classification of receiving water or aquifer: 6. Owner of facility: Christian Faith Fellowship Church 7. Operator of facility: 8. Co-Permittee of facility (where applicable): 9. Location of facility: a. Municipality & County Hardyston Twp. - Sussex County b. Street address Route 94 Block 75 Lots 60-62 c. Block(s) and Lot(s) 10. Location of discharge (i.e. degrees, minutes, a. Longitude seconds): b. Latitude \_\_\_ or c. State Plane Coordinates 11. Present permitted flow or permit condition 0.003 MGD (DSW) or daily maximum (DGW): \*13. Summary of population served/to be served Current (Year 2015) Build-out including major seasonal fluctuations: Population Total \*14. Summary of wastewater flow received/to be Current (Year 2015) Flow **Build-out Flow** received as a 3-day average flow for DSW or a (in MGD) (in MGD) daily maximum flow for DGW: Residential flow Commercial flow Industrial flow Infiltration/Inflow **Facility Total** 0.002 0.003 MGD

## ON-SITE DOMESTIC TREATMENT FACILITIES FACILITY NAME: SUSSEX COUNTY ICE ARENA d/b/a SKYLANDS ICE WORLD

Existing or proposed facility:	Existing					
New Jersey Pollutant Discharge Elimination     System Permit Number:	NJ0132284					
3. Discharge to ground water (DGW) or surface water (DSW):	DGW					
4. Receiving water or aquifer:	Pyroxene Gneiss Geology					
5. Classification of receiving water or aquifer:						
6. Owner of facility:	Playbiz LLC					
7. Operator of facility:						
8. Co-Permittee of facility (where applicable):						
9. Location of facility:						
a. Municipality & County	Hardyston Twp. – Sussex Cou	nty				
b. Street address	2765 Route 23					
c. Block(s) and Lot(s)						
10. Location of discharge (i.e. degrees, minutes,	a. Longitude					
seconds):	b. Latitude or					
	c. State Plane Coordinates					
	X- 486319 Y- 821556					
11. Present permitted flow or permit condition (DSW) or daily maximum (DGW):	0.0085 MGD					
*13. Summary of population served/to be served including major seasonal fluctuations:	Current (Year 2015) Population	Build-out Population				
Total						
*14. Summary of wastewater flow received/to be received as a 3-day average flow for DSW or a daily maximum flow for DGW:	Current (Year 2015) Flow (in MGD)	Build-out Flow (in MGD)				
Residential flow						
Commercial flow		0.0085				
Industrial flow						
Infiltration/Inflow						
Facility Total						
	0.006	0.0085 MGD				

#### ON-SITE DOMESTIC TREATMENT FACILITIES FACILITY NAME: HARDYSTON TWP. MIDDLE SCHOOL 1. Existing or proposed facility: Existing 2. New Jersey Pollutant Discharge Elimination NJ0140210 System Permit Number: 3. Discharge to ground water (DGW) or surface DGW water (DSW): 4. Receiving water or aquifer: Mixed Gneiss Geology 5. Classification of receiving water or aquifer: 6. Owner of facility: Hardyston Twp. Board of Education John Roe 7. Operator of facility: 8. Co-Permittee of facility (where applicable): 9. Location of facility: a. Municipality & County Hardyston Twp. - Sussex County b. Street address 183 Wheatsworth Road c. Block(s) and Lot(s) 10. Location of discharge (i.e. degrees, minutes, a. Longitude \_\_\_\_ seconds): b. Latitude \_\_\_\_ or c. State Plane Coordinates 11. Present permitted flow or permit condition 0.01175 MGD (DSW) or daily maximum (DGW): \*13. Summary of population served/to be served Current (Year 2015) Build-out including major seasonal fluctuations: Population Population Total \*14. Summary of wastewater flow received/to be Current (Year 2015) Flow **Build-out Flow** received as a 3-day average flow for DSW or a (in MGD) (in MGD) daily maximum flow for DGW: Residential flow Commercial flow Industrial flow Infiltration/Inflow **Facility Total** 0.006 0.01175 MGD