VIII. Municipal Wastewater Management Chapters <u>Frankford Township</u>

2010 Population = 5,565 Land Area = 34 square miles

2010 Population Density = 164 persons/sq. mile

This municipal chapter 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

This section describes facilities regulated by NJ Dept. of Environmental Protection that have individual New Jersey Pollutant Discharge Elimination System (NJPDES) Permits that discharge to surface water or ground water.

Branchville / SCMUA Paulins Kill Facility

The NJ Dept. of Environmental Protection (DEP) approved a Municipal Wastewater Management Plan for Branchville Borough, prepared by Cerenzio & Panaro Engineers, by letter dated 1-17-2007. This proposed wastewater treatment facility (NJPDES Permit NJ0146676) is designed to serve Branchville Borough and some sites in Frankford Township. The Frankford Twp. Elementary School remains in the future sewer service area, but will not be connecting to SCMUA facility at this time. The future wastewater flow is projected at 144,000 GPD for Branchville and 26,000 GPD for the sites in Frankford, for a total of 170,000 GPD for the SCMUA facility. The daily maximum flow for the Discharge to Ground Water NJPDES Permit is 200,000 GPD. The treated wastewater will be discharged to ground water in disposal beds located on Route 206 in Frankford Twp. The treatment plant will be owned and operated by the Sussex County Municipal Utilities Authority.

Frankford Town Center

The proposed wastewater treatment facility would serve the sewer service area at Ross' Corner area (Block 11 Lots 1, 1.01, 1.02, 1.03, 13, 13.01-13.15, 14 and 15) located on Route 206 and Route 565. The proposed wastewater treatment facility has a projected wastewater flow of 210,394 gallons per day (GPD) discharge to groundwater and will be owned and operated by the Sussex County Municipal Utilities Authority (SCMUA). Based on current zoning and the Sussex Commons project, the projected wastewater flow would mostly serve commercial and light industrial uses, with 18 residential units proposed.

The approved plan provides for the abandonment of the existing wastewater facility (NJPDES Permit NJ0103748) at Skylands Park and the transfer of its wastewater flow to the new facility.

Sussex County/ Homestead Complex

This existing wastewater treatment facility (NJPDES Permit No.NJ0022063) serves the County facilities located on Morris Turnpike, including the Fire Academy, Main Library, and other facilities. It also serves the Homestead nursing home which is privately owned. The current annual average flow is 18,200 GPD and the permitted flow for this facility is 50,000 GPD. The treated wastewater is discharged to the Paulins Kill River classified as FW2-NT, Category One. The treatment plant is owned and operated by the County of Sussex.

Frankford Township - Skylands Park Management

This wastewater treatment facility (NJPDES Permit No. NJ0103748) served the 28-acre Skylands Park minor league baseball stadium located at Ross's Corner, on Route 206 and Route 565. When the stadium was in use, the annual average flow was 1,800 GPD, and the permitted flow for this facility is 24,000 GPD. The treated wastewater is discharged to ground water. The treatment plant would be abandoned in future, and wastewater flow directed to the Frankford Town Center treatment plant when it is constructed.

The following table lists facilities typically constructed prior to State regulations, and are 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	Bloc k	Lot	Street Address	X Coord.	Y Coord.
NJG0087319	Bentley Assisted Living Facility	Senior citizen facility (33,600 sq. ft.) with laundry	48.02	4.02	3 Phillips Road	444135	786473
NJG0109541	Culver Brook Apts.	16 units in apartment bldg.	58	6	96 Union Turnpike	424177	843203
NJG0135283	Culver Lake Golf Club	9-hole golf club with restaurant (100 seats)	51	2	125 E. Shore Road	424828	845577
NJG0100838	Frankford Township School	School with capacity for 700 students and 100 staff	25	23	2 Pines Road	440150	848441
NJG0134473	Harmony Ridge Campground	Campground with 225 sites	68	7	Mattison Avenue	423618	858732
NJG0085944	Kymer Camping Resort	Campground with 250 campsites, 4 bathhouses, laundry facility	42	18	69 Kymer Road	422428	841892
NJG0128406	Sussex County Fairgrounds	Fairgrounds with admin. offices and public restrooms	11	4	Plains Road	429520	860972
NJG0134325	Yetters Diner	130-seat restaurant with 4 bedroom house	18	5.01	89 Route 206	406461	845702

Build-out in Septic Areas and DEP Nitrate Dilution Modeal

For the build-out analysis of septic systems, all undeveloped land was included as available dilution for future septic density and used to calculate "Total New Septics Allowed". For "Total New Septics based on Zoning", the results from the DEP Build-out Model were further modified using the Sussex County Strategic Growth Plan build-out analysis done by municipality and by zone.

For the purposes of this analysis it is inconsequential if one municipality's zoning exceeds the DEP Model Total Allowed, provided that the regional HUC-11 watershed does not exceed the Total New Allowed Units. The regional HUC-11 watershed totals are provided on pages 36 – 39 of the County WMP. For the HUC-11 watersheds in their entirety, Total Zoned is below the DEP Model for Total Allowed so the nitrate dilution is projected to be within acceptable range if the town were built-out based on existing zoning

Table B - Additional Development at Build-out, Septic Area					
Watershed (HUC-11)	Total Undeveloped Land Available for Dilution	DEP Nitrate Dilution Model: Acres/New Septic	DEP Model: Total New Septics Allowed	Total New Septics based on Zoning	
Big Flat Brook	190	5.2	37	30	
Flat Brook	13	5.0	2	2	
Trout Brook/ Swartswood Lake	279	4.8	58	52	
Paulins Kill (above Stillwater Village)	4,668	4.8	970	987	
Papakating Creek	5,166	4.9	1,055	1,092	

The NJDEP Build-out Model should be viewed as a rough indicator. The Model includes variables with a range of values (such as household size) and assumes that existing zoning would not change. It is a regional planning tool with just one focus: to identify possible areas of future stresses on ground water quality. The number of maximum allowable units is a theoretical number, and local municipal plans could provide for much less growth. There are many other considerations for municipalities, and it is not meant to replace or override the local perspective. Given the rural character of Sussex County, its roads and infrastructure, its quality of life, these are some other factors important to planning for future growth. **Appendix K** further describes the NJDEP Build-out Model and some of its limitations as well.

3) Identify any areas subject to federal 201 grant limitations - NONE

4) Provide a checklist of ordinances adopted and pending to complete the municipal chapter.>

Table C - Summary of Ordinance Adoption					
Ordinance	Date Adopted	Ordinance Title	Comments and More Protective Standards		
Stormwater Management (Ground Water Recharge Maintenance)	April 19, 2006	An Ordinance to Create Stormwater Control in Code of Frankford Twp.			
Riparian Zone Protection					
(optional)					
Steep Slope Protection					
(optional)					
Dry Conveyances in Sewer Service Area					
Septic Connection in Sewer Service Area					

Municipal Chapter – Frankford Township 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.

On-Site Domestic Treatment Facilities – These facilities are listed in Tables insert ##s here.

Industrial Wastewater Facilities - These facilities are listed in Tables insert ##s here.

ON-SITE DOMESTIC TREATMENT FACILITIES FACILITY NAME: SUSSEX COUNTY HOMESTEAD FACILITY 1. Existing or proposed facility: Existing 2. New Jersey Pollutant Discharge Elimination NJ0022063 System Permit Number: 3. Discharge to ground water (DGW) or surface DSW water (DSW): 4. Receiving water or aquifer: Paulins Kill River 5. Classification of receiving water or aquifer: FW2- NT (C2) 6. Owner of facility: Sussex County 7. Operator of facility: 8. Co-Permittee of facility (where applicable): 9. Location of facility: a. Municipality & County Frankford Twp. - Sussex County b. Street address Morris Turnpike 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-421735 Y-835397 11. Present permitted flow or permit condition 0.050 MGD (DSW) or daily maximum (DGW): *13. Summary of population served/to be served Current (Year 2013) Build-out including major seasonal fluctuations: Population Population **Total** *14. Summary of wastewater flow received/to be Current (Year 2013) 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 0.011 MGD 0.050 MGD **Facility Total**

^{*} Infiltration/Inflow (I/I): Existing I/I should be identified. However, additional future I/I may <u>not</u> be projected. (The NJPDES Treatment Works Approval regulations make numerical allowances for I/I.) The existing I/I can be carried-over and accounted for in the total future wastewater flow.

ON-SITE DOMESTIC TREATMENT FACILITIES FACILITY NAME: SKYLANDS PARK 1. Existing or proposed facility: Existing 2. New Jersey Pollutant Discharge Elimination NJ0103748 System Permit Number: 3. Discharge to ground water (DGW) or surface DGW water (DSW): 4. Receiving water or aquifer: Martinsburg Shale 5. Classification of receiving water or aquifer: GW-2 6. Owner of facility: Millenium Sports ~ 7. Operator of facility: 8. Co-Permittee of facility (where applicable): 9. Location of facility: a. Municipality & County Frankford Twp. - Sussex County b. Street address Championship Drive, Route 565 c. Block(s) and Lot(s) Block 11 Lot 10. Location of discharge (i.e. degrees, minutes, a. Longitude seconds): b. Latitude _ or c. State Plane Coordinates X - 433664 Y - 83504511. Present permitted flow or permit condition 0.024 MGD (DSW) or daily maximum (DGW): *13. Summary of population served/to be served Current (Year 2013) Build-out including major seasonal fluctuations: Population Population Total *14. Summary of wastewater flow received/to be Current (Year 2013) 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 0 0 Industrial flow Infiltration/Inflow **Facility Total** 0 0

Note: The Build-out Flow is shown as Zero, because when sewers are constructed, this facility will be closed and wastewater flow will be directed to the new Frankford Town Center/SCMUA Sewage Treatment Plant

ON-SITE DOMESTIC TREATMENT FACILITIES FACILITY NAME: FRANKFORD TOWN CENTER					
Existing or proposed facility:	Proposed				
New Jersey Pollutant Discharge Elimination System Permit Number:	NJ0208990				
3. Discharge to ground water (DGW) or surface water (DSW):	DGW				
4. Receiving water or aquifer:	Paulins Kill and Wallkill Aquifers				
5. Classification of receiving water or aquifer:	GW-2				
6. Owner of facility:	Sussex County MUA				
7. Operator of facility:	Sussex County MUA				
8. Co-Permittee of facility (where applicable):					
9. Location of facility:					
a. Municipality & County	Frankford Twp. – Sussex County				
b. Street address	Routes 565 and 206				
c. Block(s) and Lot(s)	Block 11 Lots 1, 1.01, 1.02, 1.03, 13, 13.01-13.15, 14, 15				
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 (DSW) or daily maximum (DGW):	0.210 MGD				
*13. Summary of population served/to be served including major seasonal fluctuations:	Current (Year 2013) Population	Build-out Population			
Total	0	72			
*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 2013) Flow (in MGD)	Build-out Flow (in MGD)			
Residential flow		0.0042			
Commercial flow		0.1647			
Light Industrial flow		0.04147			
Infiltration/Inflow		0			
Facility Total	0	0.21039 MGD			