

WASTEWATER MANAGEMENT PLAN

Upper Delaware Water Quality
Management Plan
Watershed Management Area 11

**Lambertville Municipal
Utilities Authority**
Hunterdon County

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Section 1

Introduction

1.1 Purpose

"The purpose of this document is to provide a comprehensive Wastewater Management Plan (WMP) for the Lambertville Municipal Utilities Authority. The WMP has been submitted to the New Jersey Department of Environmental Protection (Department) for approval so that it may be incorporated into the Upper Delaware Water Quality Management Plan(s) via the plan amendment procedure (N. J. A. C. 7:15). "

1.2 Wastewater Management Facilities

The Lambertville Municipal Utilities Authority's treatment plant, completed in 1955, was originally designed to treat and discharge an average flow of 0.65 million gallons per day (MGD). In 1983, construction of an expansion of capacity to 1.5 MGD was undertaken and the plant was upgraded with rotating biological contactors and aerobic and anaerobic sludge digestion. Subsequent improvements were made to the aerated grit chamber in 2004 and the screening system in 2004. LMUA most recently replaced existing equipment throughout the facility as part of the Facility and Conveyance System Improvements project.

Further information with regard to these facilities is included in Section 2.

1.3 Description of Planning Area

The Lambertville Municipal Utilities Authority (LMUA) WMP Planning Area includes the following Hunterdon County municipalities:

- City of Lambertville
- Borough of Stockton

Pursuant to an Agreement dated July 19, 1965 (amended August 4, 1980 and January 5, 1982, and July 6, 1995), the LMUA also provides service to the Bucks County Water and Sewer Authority (BCW&SA) which is wholly contained in the State of Pennsylvania. Since the BCWS&A service area lies outside the State of New Jersey it is not shown as part of the WMP Planning Area, but the flows from BCW&SA are accounted for in the tabular data included in Section 2.

The delineation of the LMUA WMP planning area is based on the municipal boundary of the City of Lambertville and the Borough of Stockton.

Map #1 in Section 7 illustrates the delineation of the existing WMP planning area boundary, and labels the municipalities contained therein..

1.4 Summary of Significant Actions

No significant actions are presented in this WMP. This WMP is being submitted in compliance with N.J.A.C. 7:15.

Section 2

Discussion of Existing and Future Wastewater Facilities

2.1 Domestic Treatment Facilities

All areas served by sewers within the planning area are served by the Lambertville Municipal Utilities Authority Regional Environmental Pollution Control Facility (REPCF) located in the City of Lambertville, NJ.

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

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 if the WMP acknowledges adequate arrangements for enforcement of the requirement (such as through a municipal or sewerage authority ordinance). The Lambertville Municipal Utilities Authority (LMUA) ordinance mandates the discontinuation of Individual Subsurface Sewage Disposal Systems and connection to the sewer once the sewer service has become available. The LMUA ordinance can be found in Appendix C.

Development in areas mapped as wetlands, flood prone areas, designated river areas, or other environmentally sensitive areas may be subject to special regulation under Federal or State statutes or rules. Interested persons should check with the Department of Environmental Protection and the governing federal agency with jurisdiction for the latest information. Depiction of environmental features is for general information purposes only, and shall not be construed to define the legal geographic jurisdiction of such statutes or rules.

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 WMP and compliance is required where applicable.

The following narrative describes the sewage treatment facility within the WMP Area.

2.1.1 Lambertville Municipal Utilities Authority (LMUA)

The LMUA REPCF, completed in 1955, was originally designed to treat and discharge an average flow of 0.65 million gallons per day (MGD). In 1983, construction of an expansion of capacity to 1.5 MGD and the plant was upgraded with rotating biological contactors and aerobic and anaerobic sludge digestion. Subsequent improvements were made to the aerated grit chamber in 2004 and the screening system in 2004. In 2009, LMUA undertook facility improvements that included replacement of the RBCs, sludge pumps, new aeration lines and blower, a new magnesium hydroxide storage facility, electrical system improvements, new reclaimed water for beneficial reuse filters, and a water coupled heat pump for the administration building.

LMUA currently provides treatment generally consisting of a screening system, aerated grit chamber, primary settling tanks, rotating biological contactors, secondary settling tanks, chlorine contact, dechlorination. Sludge is stored and processed onsite. Liquid sludge can be disposed of at Spectraserv or the Stony Brook Regional Sewerage Authority (SBRSA) for incineration. However, a majority of the sludge is processed through a belt filter press. Sludge cake resulting from the belt filter press operation is disposed of at either SBRSA or the Atlantic County Municipal Utilities Authority.

2.2 Facility Table

Detailed facility tables for the LMUA REPCF are provided in following Table 2-1.

SUMMARY OF EXISTING AND FUTURE DOMESTIC WASTEWATER TREATMENT FACILITIES

Table 2-1

Name of Facility: Lambertville Sewerage Authority WPCP

1. Existing or Proposed Facility:	Existing	
2. NJPDES Permit Number	NJ0020915	
3. DGW or DSW:	DSW Delaware	
4. Receiving Water Body:	River DRBC Zone	
5. Classification of Receiving Water:	1E Lambertville Municipal Utilities Authority (LMUA)	
6. Owner of Facility	LMUA	
7. Operator of Facility:	None	
8. Co-Permittee of Facility:		
9. Location of Facility:	City of Lambertville, Hunterdon County	
a. Municipality and County:	Lambert Lane	
b. Street Address:	Block 1043, Lot 5	
c. Block and Lot(s):		
10. Location of discharge:	74° 56' 45" West	
a. Longitude:	40° 21' 30" North	
b. Latitude:	1.5 mgd	
11. Present permitted flow:		
12. Summary of population served/to be served:	Present Population Served (2009)	Future Population Served
Municipality		
City of Lambertville	5,498	5,784
Borough of Stockton	1,077	1,093
Bucks County Water & Sewer Authority (1)	-	-
TOTAL	6,575	6,877

SUMMARY OF EXISTING AND FUTURE
DOMESTIC WASTEWATER TREATMENT FACILITIES

Table 2-1 (con't)

13. Summary of wastewater received/to be received:

Municipality	Present Wastewater Flow (2009) <i>mgd</i>	Future Build-out <i>mgd</i>
City of Lambertville		
Residential Flow	0.300	0.392
Commercial Flow	0.096	0.102
Industrial flow	0.000	0.000
Infiltration/inflow	0.030	0.030
TWA's approved but not connected (3)	0.000	0.000
Subtotal	0.426	0.524
Borough of Stockton		
Residential flow	0.043	0.047
Commercial flow	0.014	0.015
Industrial flow	0.000	0.000
Infiltration/inflow	0.005	0.005
Subtotal	0.062	0.067
City of Lambertville and Borough of Stockton Total	0.488	0.591
Bucks County Water & Sewer Authority (2)	0.419	0.625
 TOTAL	 0.907	 1.216

Notes:

- (1) Population figures not available. See Note 2.
- (2) Flows from BCWSA are limited by a contractual maximum flow allocation of 0.625 mgd as defined in a contractual agreement, as amended, between LMUA and BCWSA
- (3) Flow attributed to TWA's approved but not yet connected have been broken out for clarity.

2.3 Population

The population estimates reflect data taken from the Hunterdon County Growth Management Plan (2007) and the build-out calculations as contained herein.

Population data for the BCW&SA is not available.

2.4 Community Data

2.4.1 City of Lambertville

The estimate of residential flow was based on the number of residential billing accounts and the percentage of residential flow/total plant flow based on the past 12 months of metered data for the City of Lambertville. Future wastewater flows were calculated by the build-out methodology discussed in Section 4.

Commercial flows for 2009 were estimated based on the number of commercial billing accounts and the percentage of commercial flow/total plant flow based metered dated provided by the City of Lambertville. This figure also includes allowances for commercial accounts directly billed using water usage data.

Future residential and commercial wastewater flows were based on the application of zoning to undeveloped parcels suitable for development within the sewer service area. This assessment includes a 15% increase in existing commercial flow as more of the existing commercial space becomes fully utilized. The build-out analysis is discussed further in Section 4.

The inflow/infiltration estimate is based on flow remaining from the City of Lambertville after deducting residential and commercial flows from the average monthly flow from the City of Lambertville. Average monthly flow is based on the average daily flow metered at the LMUA treatment plant for the period December 2008 through November 2009. Based on this, the average daily flow for the City of Lambertville is 0.4 million gallons per day (MGD).

2.4.2 Borough of Stockton

Unlike the City of Lambertville, residential billing data by parcel is not available for the Borough of Stockton. Accordingly, the estimate of residential flow is based on the estimated population times 75 gallons per capita per day in accordance with NJAC 7:15-5.18 (f).

Commercial flows for 2009 were estimated based on the City of Lambertville's ratio between residential and commercial flow.

The build-out analysis discussed above for the City of Lambertville was also applied to the Borough of Stockton in determining future residential and commercial wastewater flows.

The inflow/infiltration estimate is based on the flow remaining from the Borough of Stockton after deducting residential and commercial flows from average monthly flows from the Borough of Stockton.

Average monthly flow is based on the average daily flow metered at the LMUA treatment plant for the period December 2008 through November 2009. Based on this, the average daily flow from the Borough of Stockton was 0.062 MGD.

2.4.3 Bucks County Water and Sewer Authority

Flow from the BCW&SA and treated by LMUA is currently governed by an Agreement dated July 19, 1965. This Agreement has been amended several times, most recently July 6, 1995. The terms

of the Agreement are such that BCW&SA has a limited maximum flow allocation with LMUA of 0.625 MGD.

Estimates of total flow from the BSW&SA are based on average daily flow metered by LMUA for the period November 2008 through December 2009. Based on this, the average daily flow from the BCS&SA is 0.419 MGD. Future flow from the BCS&SA is based on the contractual maximum flow allocation of 0.625 MGD as indicated above.

Section 3

Basis for Service Area Delineation

3.1 Introduction

The service area delineations provided in this plan are based on a number of sources, including the municipal boundaries of the City of Lambertville and the Borough of Stockton. The following sections describe the sources used to establish the planning area and service area delineations, as depicted in the various maps included in Section 6.

3.2 LMUA Service Area Delineations

3.2.1 City of Lambertville

The LMUA service area delineation for the City of Lambertville was primarily determined by depicting all parcels that are currently sewered via the sanitary sewer system which subsequently flow to and have a billing account with the LMUA. A majority of all parcels in the City of Lambertville are currently served by LMUA.

3.2.2 Borough of Stockton

Billing account data was not available for the Borough of Stockton. Accordingly, a list of vacant and septic parcels was obtained from the Borough records and were used to determine which parcels were not sewered, with all remaining parcels reflecting the current service area in the Borough.

Section 4

Environmental Analyses and Assessment

4.1 Introduction

The following presents the various environmental analyses and assessments performed as part of this WMP update.

Nearly all homes located within the City of Lambertville and the Borough of Stockton are sewered at the present time. Less than 40 homes are currently served by septic systems in the City of Lambertville. Less than 10 homes are currently served by septic systems in the Borough of Stockton.

4.2 Environmental Constraints/Build-out Analysis

The potential future flow for the LMUA Regional Environmental Pollution Control Facility has been calculated based on present zoning for the City of Lambertville and the Borough of Stockton, and the existing and future service areas depicted in Map Nos. 2 and 3. While select undeveloped parcels do exist throughout the service area, much of the land within the LMUA Wastewater Management Planning Area is developed. For the undeveloped parcels, each was evaluated for potential build-out while taking into account zoning requirements and the constraints that might restrict development such as wetlands, stream corridors, threatened and endangered species sites or designated habitats (Landscape Project Version 2.1 Ranks 3, 4 and 5), and Natural Heritage Priority Sites.

The build-out analysis includes some properties currently served by Individual Subsurface Sewage Disposal System (ISSDS) in anticipation of their eventual connection to the sanitary sewer. Such parcels are shown as part of the Future Sewer Service Area.

Projected flow criteria from NJAC 7:14A-23.3 was used to evaluate potential flows from developable parcels. The build-out flows calculated under this analysis were:

- Lambertville: 0.097 mgd
- Stockton: 0.005 mgd

The future sewer service area flows include the conversion of existing ISSDS to sewered service.

4.3 Nonpoint Source Pollutant Loading/ Hydromodification Analysis

The City of Lambertville is currently governed by a newly adopted Stormwater Management ordinance. A copy of this ordinance is included in Appendix A. The Borough of Stockton is also governed by a Stormwater Management ordinance, found in Appendix B.

These ordinances satisfy the Non-Point Source Pollutant Loading/Hydromodification Analysis for the LMUA WMP.

4.4 Point Source Pollutant Loading Analysis

The Lambertville MUA WMP locations excluded from the existing and/or future sewer service areas are "Environmentally Constrained Areas" that include Preserved Farmland, Flood Prone Areas, Freshwater Wetlands, Landscape Project Data (Ranks 3, 4, 5), Township Parks, Open Space or Surface Water bodies. These identified constrained areas are relatively small, isolated areas that do not lend themselves to regional zoning modifications. As such, further evaluation of ground water impacts and septic system density are not required to be conducted for those areas of City of Lambertville and the Borough of Stockton that are outside of the proposed sewer service area at this time.

Accordingly, those portions of the Lambertville WMP planning area not delineated as sewer service area at this time are designated as "Restricted Septic Service Area (Planning Flows of 2,000 gpd or Less AND Less than 6 Residential Units)." This designation is used where the WMP has not demonstrated that the zoning meets the nitrate planning standard of 2 ppm on a HUC11 basis (or the Highlands standard has not been met on the HUC 14). As such, residential development or subdivisions with a total of less than 6 dwelling units are allowed, but residential developments of 6 or more units must undergo a site specific nitrate dilution analysis to ensure compliance with the 2 ppm nitrate planning standard on-site. These proposals are assumed Inconsistent with the WQMP/WMP until compliance with the nitrate standard is demonstrated. This will result in any proposed subdivision of six or more dwelling units or any development with a wastewater design flow in excess of 2,000 gpd to be served by subsurface disposal systems within the City of Lambertville or Borough of Stockton being considered Inconsistent with the WMP. In order to be found Consistent, a WMP amendment shall be required and the project must comply with the requirements outlined in N.J.A.C. 7:15-5.25(h)2 for conformance with the nitrate planning standard of two mg/l, using the Department's Recharge Based Nitrate Dilution Model.

4.5 Depletive/Consumptive Water Use Analysis

The water purveyors in the LMUA Wastewater Management Planning Area are as follows:

- City of Lambertville – United Water Lambertville
- Borough of Stockton – Stockton Borough Water Department

LMUA is not aware of any new or expanded sources of water proposed by either purveyor. Accordingly, a Depletive/Consumptive Water Use Analysis is not appropriate for this WMP.

4.6 Riparian Corridor Analysis

The City of Lambertville currently monitors riparian corridors through compliance with the newly adopted Stormwater Management ordinance. A component purpose of this new ordinance is to:

“Maintain the integrity and stability of stream channels and buffers for their ecological functions, as well as for drainage, the conveyance of floodwater, and other purposes...”

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 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 for planning purposes. Jurisdictional determinations by the Department will be utilized to determine the actual extent of the sewer service on individual lots within such lesser width buffers.

Further, compliance with the riparian zone standard has been demonstrated by the adoption of the City of Lambertville's Stormwater Management Ordinance (No. 2006-09, included in Appendix A) and the Borough of Stockton's Scenic Viewshed Ordinance (No. 13-08, included in Appendix B), Steep Slopes Ordinance (No. 09-08, included in Appendix B), and Stormwater Control Ordinance (No. 17-06, included in Appendix B).

Streams within the LMUA Wastewater Management Planning Area are designated either Freshwater 2 - Non-Trout (FW2-NT) or Freshwater 2 – Trout Maintenance Category One (FW2-TMC1), with 75 foot and 300 foot buffers respectively.

In accordance with this objective, all developable areas within a 300-foot buffer of all FW2-TMC1 streams have been removed from the future sewer service area.

4.7 Endangered/Threatened Species Analysis

In accordance with this objective, all potentially developable areas within Landscape Project Version 2.1 Ranks 3, 4, and 5 have been removed from the future sewer service areas.

Section 5

Discussion of Justification for Service Area Delineation

5.1 Summary

The Basis for Service Area Delineations is discussed in Section 3.

The required environmental analyses contained in Section 4 were used primarily to exclude potentially developable portions of the LMUA's future sewer service areas that currently lie within the constrained areas shown on Map Nos. 4-1 and 4-2. Map 4-3 distinguishes among developed and developable portions of LMUA's future sewer service area, and the constrained areas within the municipalities served represented primarily by the Landscape Project Areas and Open Space, and to a lesser degree by stream corridors, wetlands and Natural Heritage Priority Sites.

LMUA does not expect any impact to existing zoning ordinances, municipal master plans, or county master plans within the LMUA Wastewater Management Planning Area arising from submission of this WMP.

5.2 Zoning and Master Plan

5.2.1 Zoning Criteria

Tabular data summarizing the zoning criteria for the City of Lambertville has been included in Appendix A. Tabular data summarizing the zoning criteria for the Borough of Stockton has been included in Appendix B.

Section 6

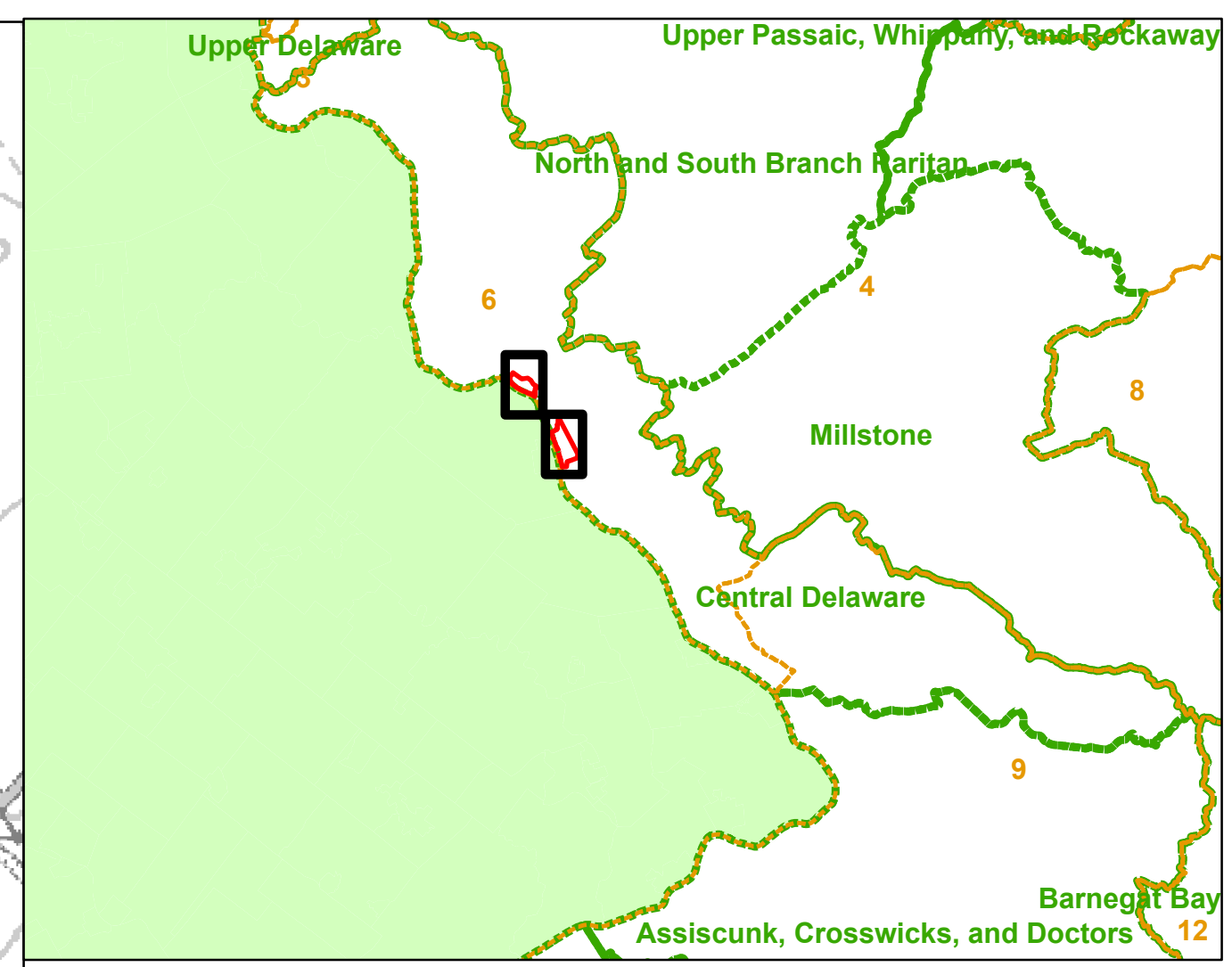
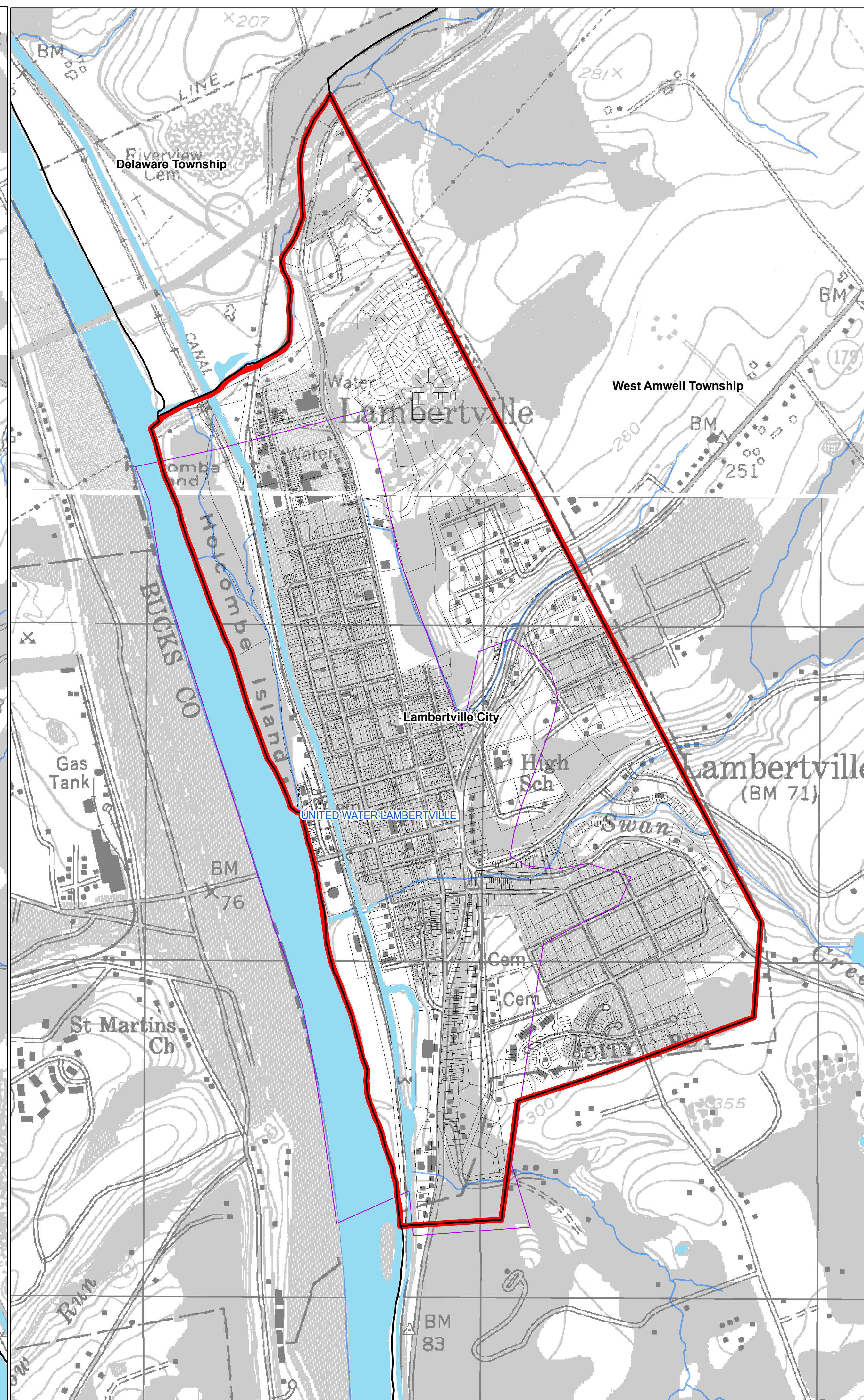
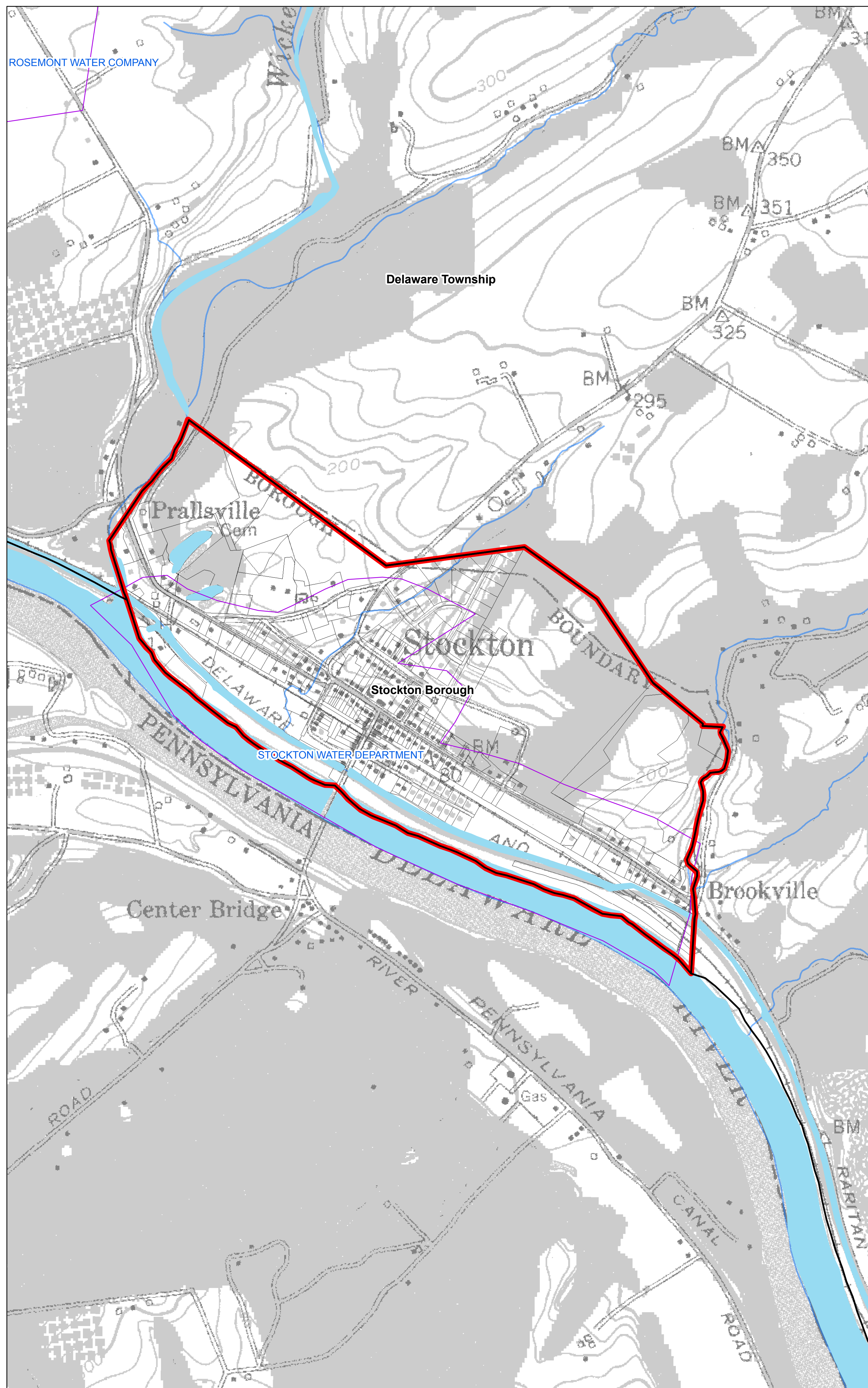
Mapping Requirements

The following graphics have been provided to comply with the mapping requirements for all WMPs

The following are common to all maps:

- Open waters are represented in blue.

The Landscape Project v2.1 Areas (LPA) shown on Map 4-2 represents only features for the Wood Turtle (Stockton only), Forested Wetland, and Forest. These are the only LPA features that lie within the LMUA Wastewater Management Planning Area with Ranks 3, 4, or 5.



Legend

- Municipal Boundaries
- Wastewater Management Planning Area
- Franchise Areas for Water Purveyors
- Open Water
- Stream
- Parcel Boundary

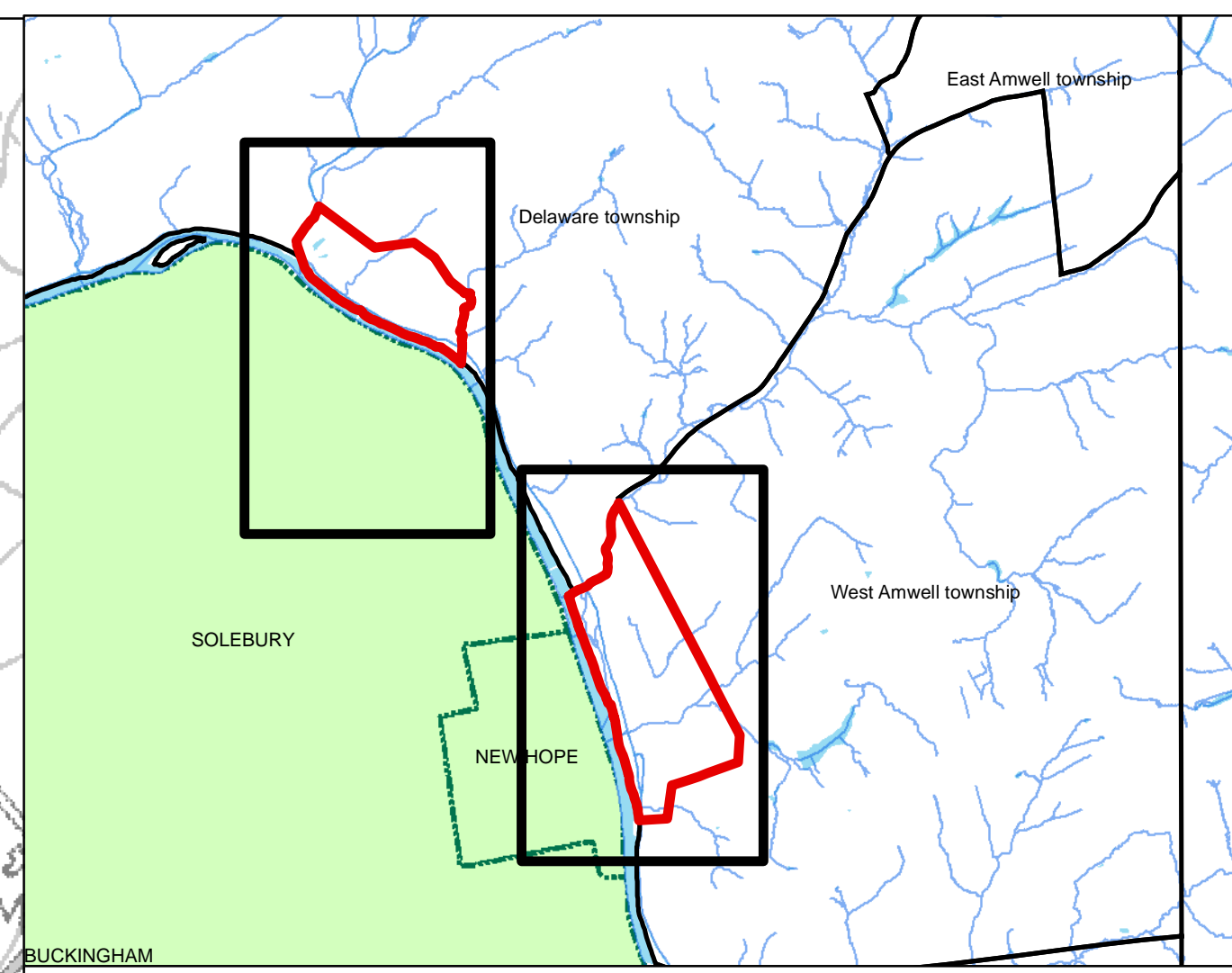
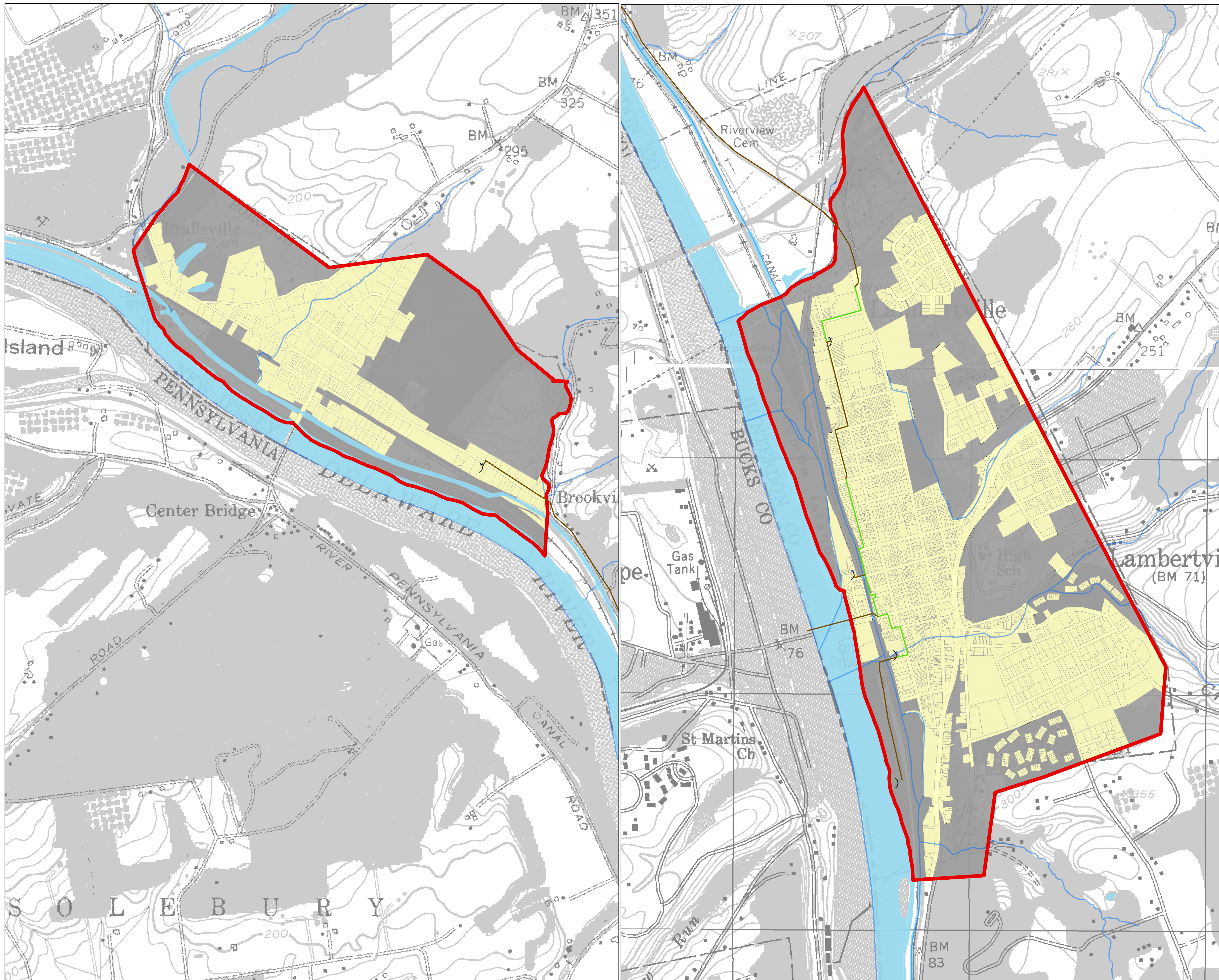
Inset Map

- Wastewater Management Planning Area
- Watershed Planning Area
- Watershed Management Areas
- Pennsylvania

Data Sources:
 New Jersey Department of Environmental Protection, 2006
 USGS 7.5 minute quadrangles - Stockton, Lambertville

This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

MAP NO. 1	
PLANNING AREA	
LAMBERTVILLE MUNICIPAL UTILITIES AUTHORITY WASTEWATER MANAGEMENT PLAN	
DATE: OCTOBER 2011	
PROJECT NO# 43504-70285 T10	



Legend

- WMP Area
- Force Main
- Trunk Line
- Pump Station
- LMUA Treatment Plant NJ0020915
- Streams
- Parcel Boundary
- LMUA Existing Sewer Service Area
- Septic
- Open Water

Data Sources:
 Lambertville Sewerage Authority, Sanitary Sewerage System, 1997
 New Jersey Department of Environmental Protection
 USGS 7.5 minute Quadrangles - Stockton, Lambertville

This map was developed using New Jersey Department of Environmental Protections Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.
 USGS 7.5 minute Quadrangles - Stockton, Lambertville

MAP NO. 2

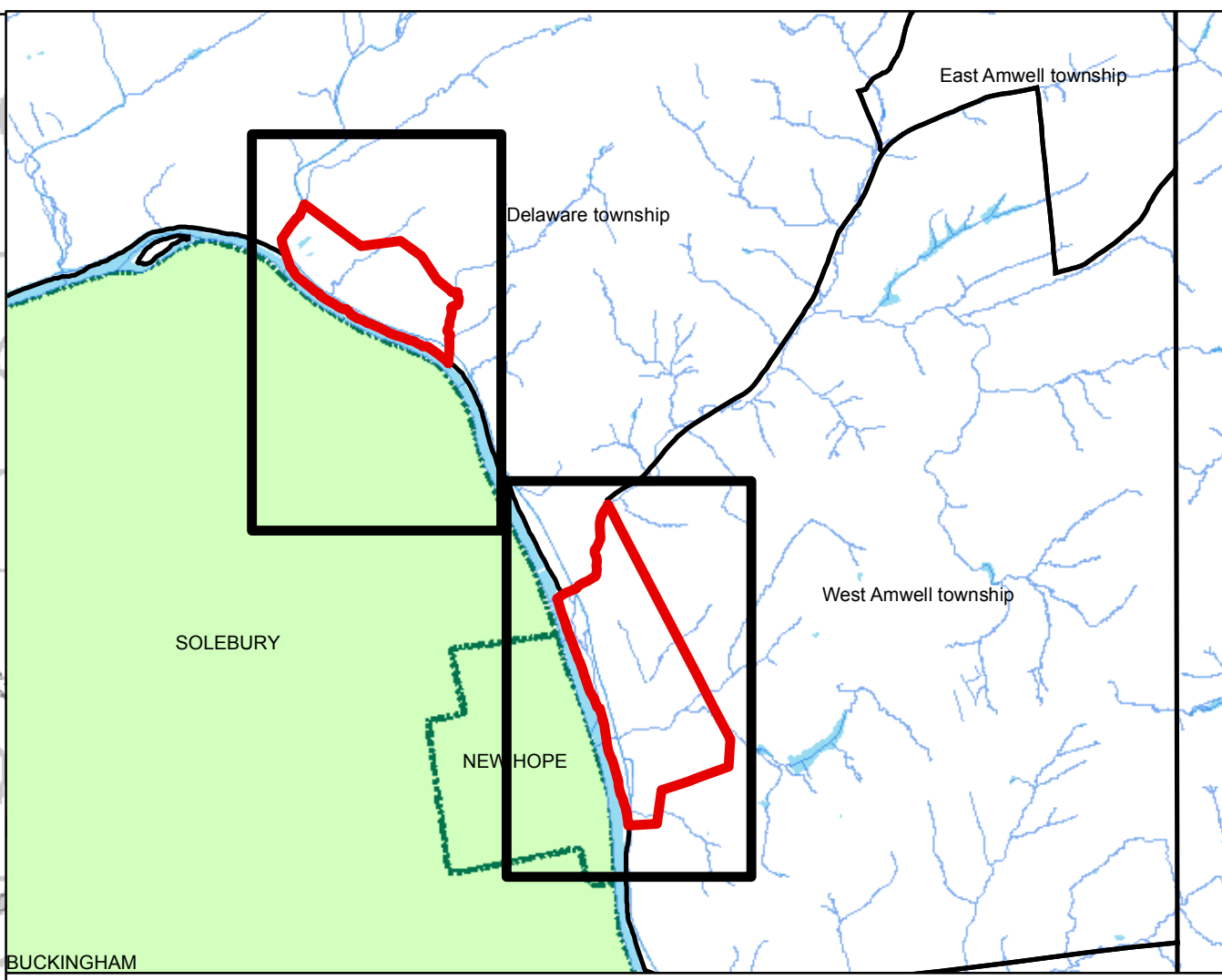
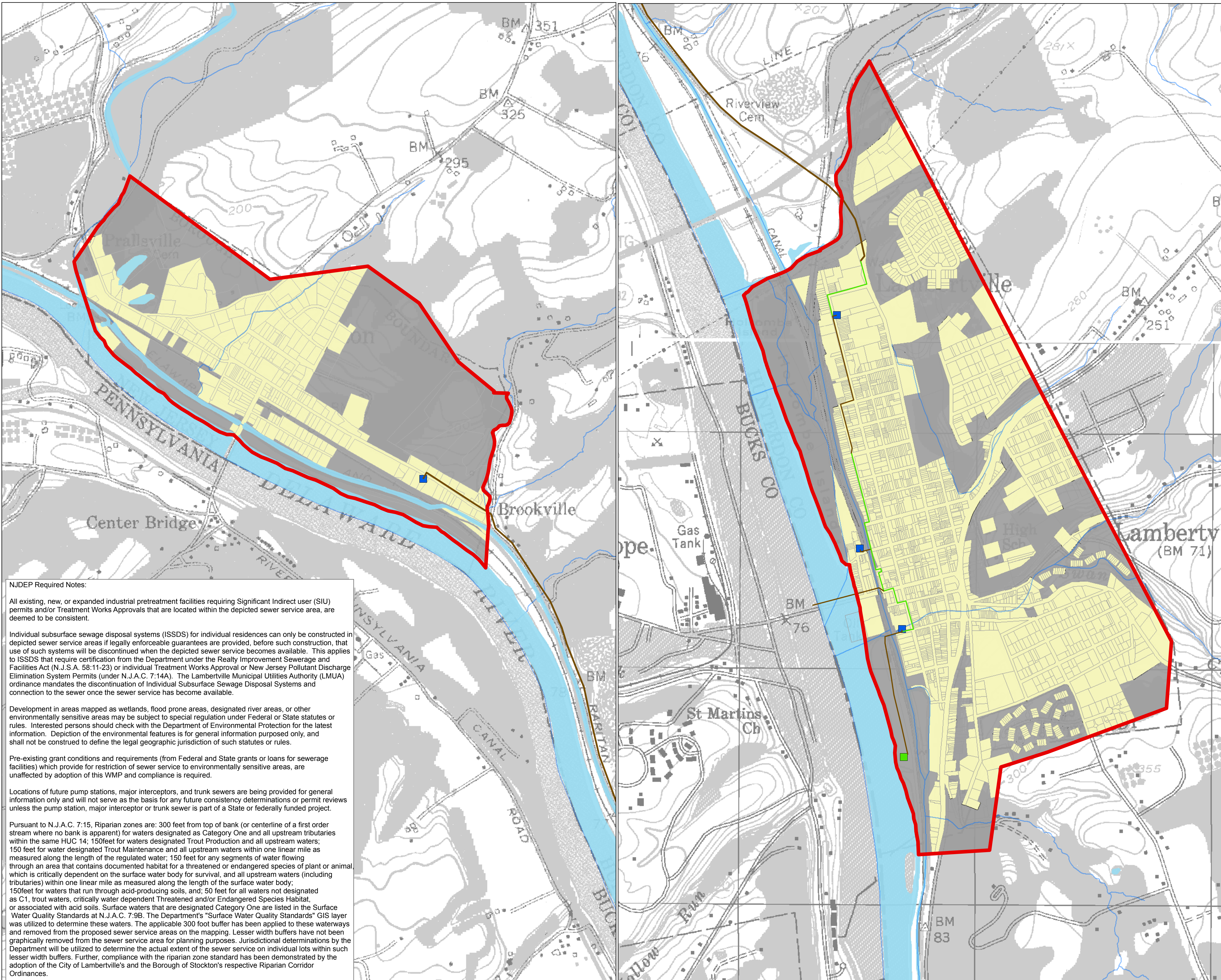
EXISTING WASTEWATER FACILITIES AND SERVICE AREAS

**LAMBERTVILLE MUNICIPAL UTILITIES AUTHORITY
 WASTEWATER MANAGEMENT PLAN**

DATE: OCTOBER 2011

PROJECT NO# 43504.82447.T10

A



- Legend**
- WMP Area
 - Force Main
 - Trunk Line
 - Pump Station
 - LMUA Treatment Plant NJ0020915
 - Streams
 - Parcel Boundary
 - LMUA Future Sewer Service Area
 - Restricted Septic Service Areas (Planning Flows of 2,000 gpd or less AND Less than 6 Residential Units)
 - Open Water

(1) Owned and operated by Borough of Stockton

Data Sources:
 Lambertville SA, Sanitary Sewerage System, 1997
 New Jersey Department of Environmental Protection
 USGS 7.5 minute Quadrangles - Stockton, Lambertville

This map was developed using New Jersey Department of Environmental Protections Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.
 USGS 7.5 minute Quadrangles - Stockton, Lambertville

NJDEP Required Notes:

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

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). The Lambertville Municipal Utilities Authority (LMUA) ordinance mandates the discontinuation of Individual Subsurface Sewage Disposal Systems and connection to the sewer once the sewer service has become available.

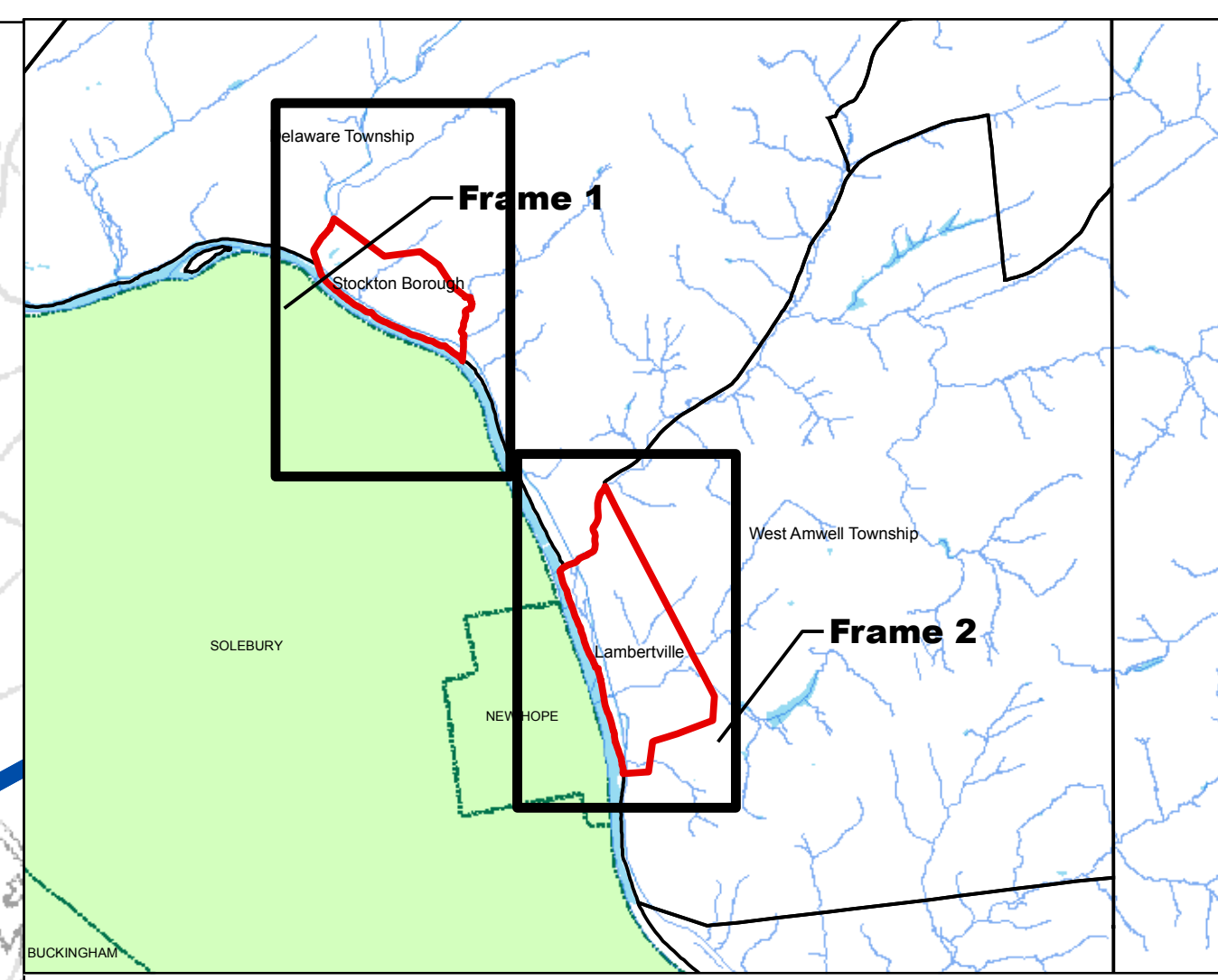
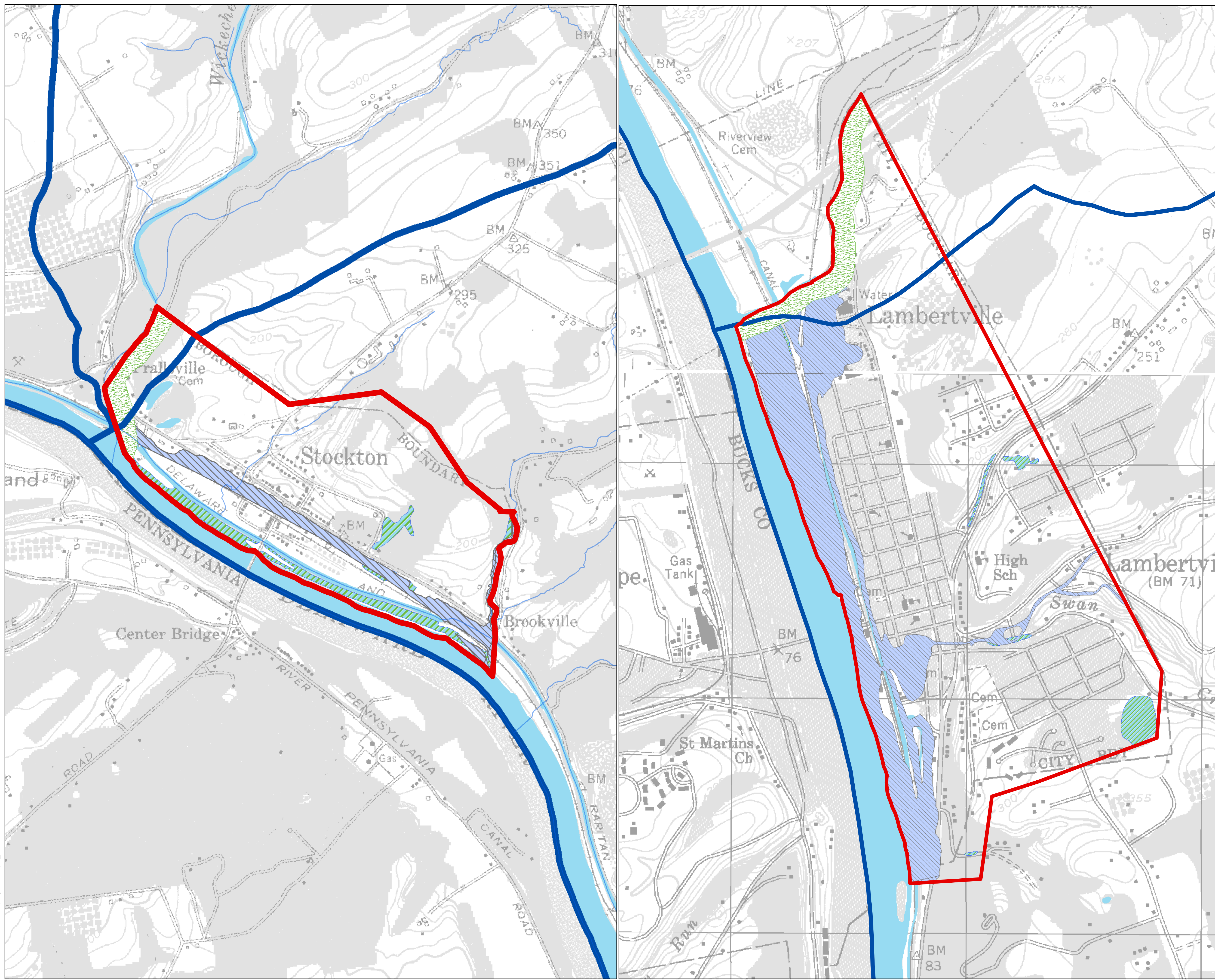
Development in areas mapped as wetlands, flood prone areas, designated river areas, or other environmentally sensitive areas may be subject to special regulation under Federal or State statutes or rules. Interested persons should check with the Department of Environmental Protection for the latest information. Depiction of the environmental features is for general information purposed only, and shall not be construed to define the legal geographic jurisdiction of such statutes or rules.

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 WMP and compliance is required.

Locations of future pump stations, major interceptors, and trunk sewers are being provided for general information only and will not serve as the basis for any future consistency determinations or permit reviews unless the pump station, major interceptor or trunk sewer is part of a State or federally funded project.

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; 150feet 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; 150feet 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 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 for planning purposes. Jurisdictional determinations by the Department will be utilized to determine the actual extent of the sewer service on individual lots within such lesser width buffers. Further, compliance with the riparian zone standard has been demonstrated by the adoption of the City of Lambertville's and the Borough of Stockton's respective Riparian Corridor Ordinances.

MAP NO. 3	
FUTURE WASTEWATER FACILITIES AND SERVICE AREAS	
LAMBERTVILLE MUNICIPAL UTILITIES AUTHORITY WASTEWATER MANAGMENT PLAN	
DATE: OCTOBER 2011	
PROJECT NO# 43504.82447.T10	



Legend

- WMP Area
- ~ Streams
- Open Water
- Riparian Corridor 300' Buffer of C1 Streams**
- FW2-TMC1
- Flood Prone Area**
- 3
- 4
- Wetlands**
- NJDEP Designated Wetlands (2002)
- Hydrologic Unit Code**
- USGS Hydrologic Unit Code (HUC) 11 Boundary
- USGS Hydrologic Unit Code (HUC) 14 Boundary

Symbol	Description
3	An area inundated by 100-year flooding, for which no BFEs have been determined.
4	An area inundated by 100-year flooding, for which BFEs have been determined.

NJDEP Required Notes:
 Development in areas mapped as wetlands, flood prone areas, designated river areas, or other environmentally sensitive areas may be subject to special regulation under Federal or State statutes or rules. Interested persons should check with the Department of Environmental Protection for the latest information. Depiction of environmental features is for general information purposes only, and shall not be construed to define the legal geographic jurisdiction of such statutes or rules.

HUC Hydrologic Unit Code
 BFE Base Flood Elevation

Data Sources:

New Jersey Department of Environmental Protection

This map was developed using New Jersey Department of Environmental Protection's Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.

USGS 7.5 minute Quadrangles - Stockton, Lambertville

MAP NO. 4-1

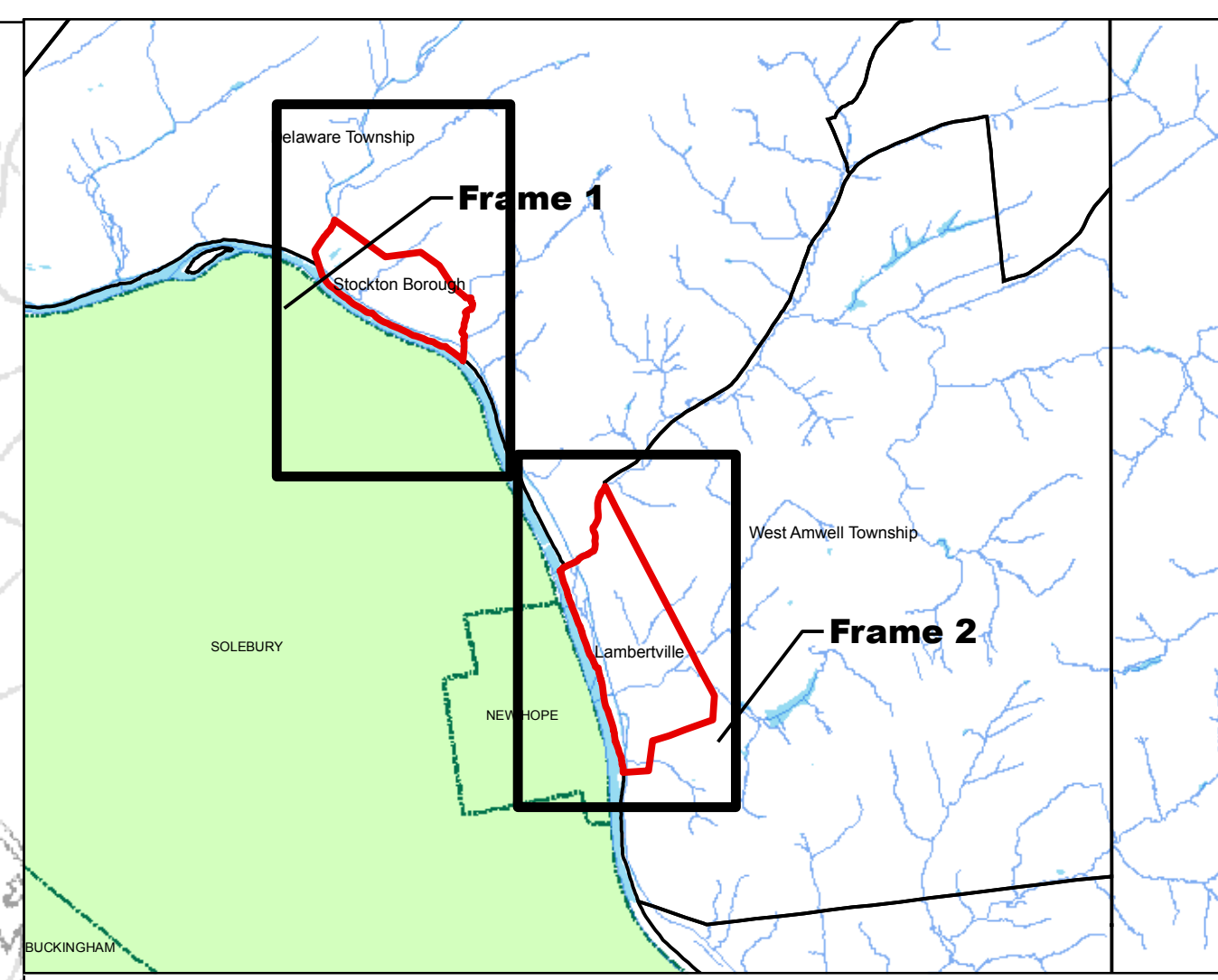
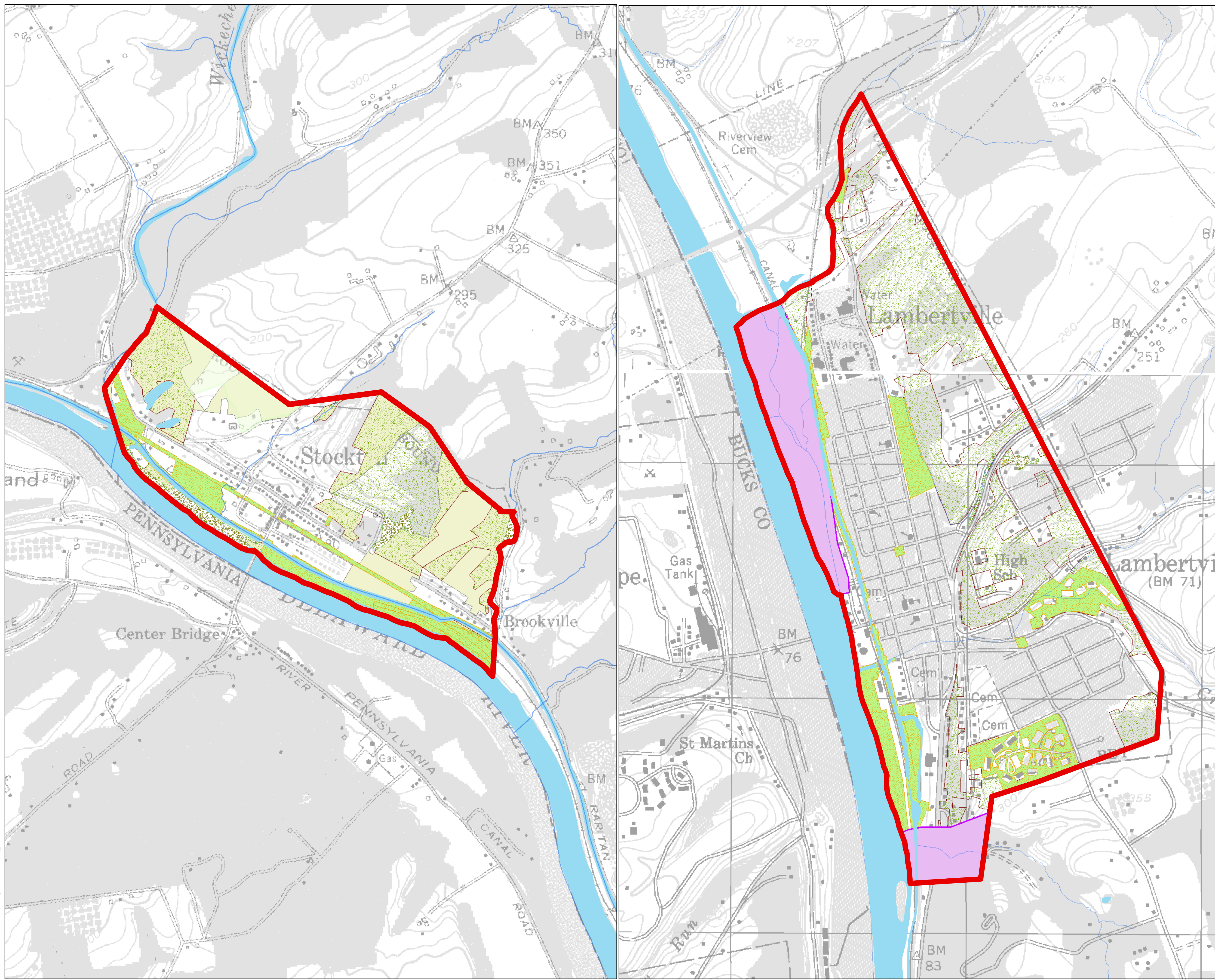
Environmental Features

**LAMBERTVILLE MUNICIPAL UTILITIES AUTHORITY
 WASTEWATER MANAGEMENT PLAN**

DATE: OCTOBER 2011

PROJECT NO# 43504-70285 T10





Legend

- WMP Area
- Open Water
- Streams
- Natural Heritage Priority Site
- Preserved Farm Lands
- Public Open Space
- Landscape Project Areas (Rank 3, 4, 5)**
- Forested Wetlands
- Forest
- Wood Turtle

NJDEP Required Notes:
 Development in areas mapped as wetlands, flood prone areas, designated river areas, or other environmentally sensitive areas may be subject to special regulation under Federal or State statutes or rules. Interested persons should check with the Department of Environmental Protection for the latest information. Depiction of environmental features is for general information purposes only, and shall not be construed to define the legal geographic jurisdiction of such statutes or rules.

Data Sources:
 New Jersey Department of Environmental Protection

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 USGS 7.5 minute Quadrangles - Stockton, Lambertville

MAP NO. 4-2

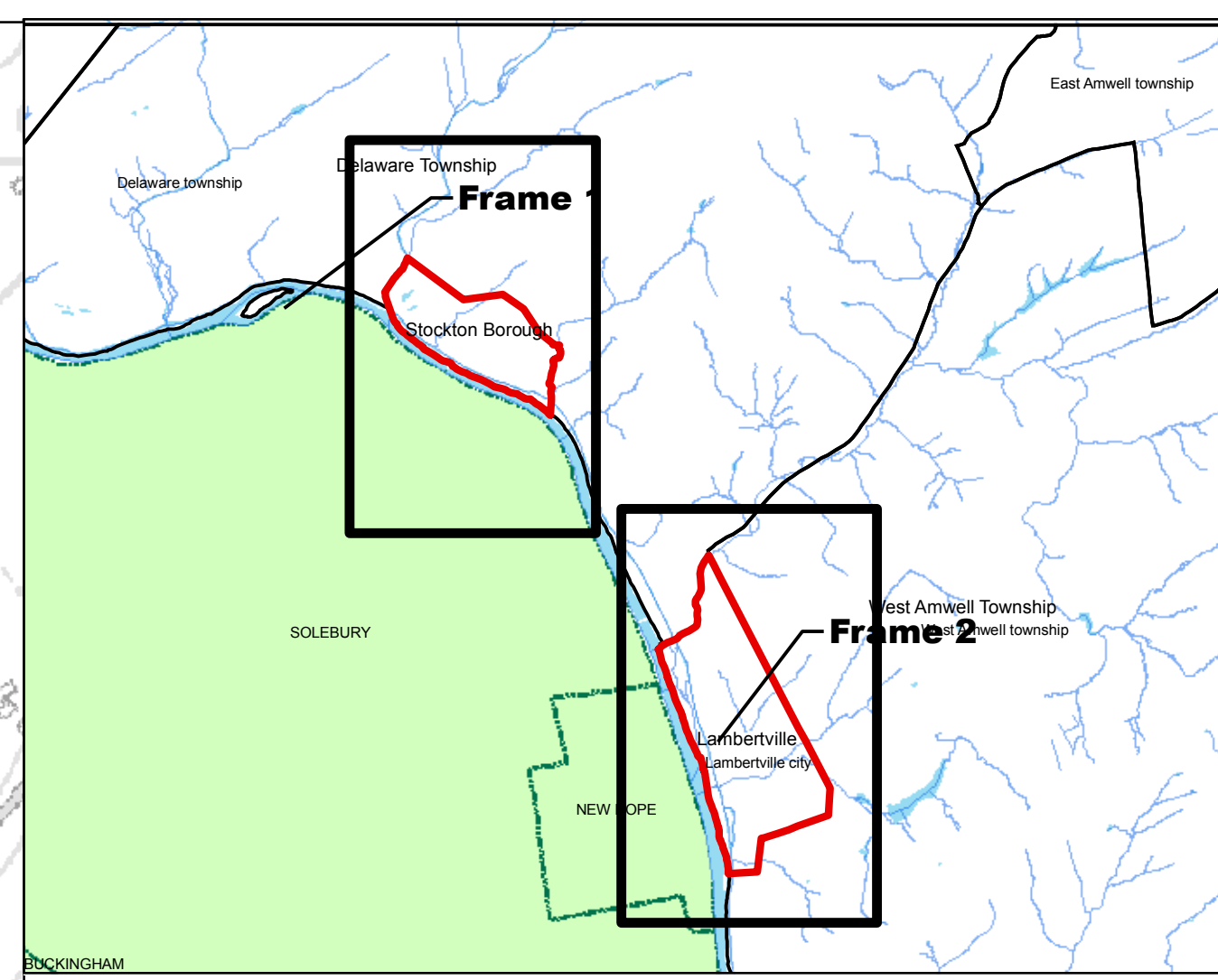
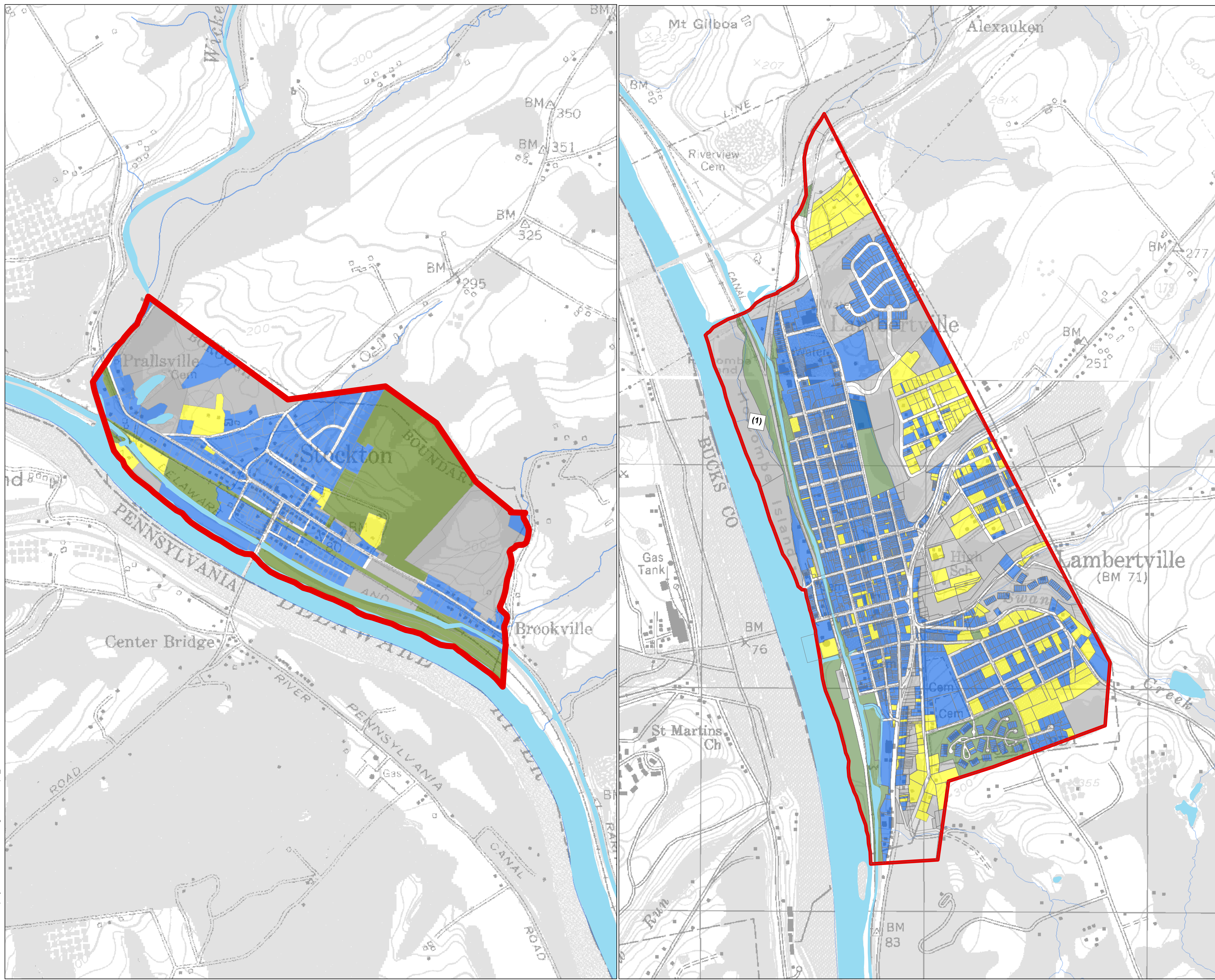
Environmental Features

**LAMBERTVILLE MUNICIPAL UTILITIES AUTHORITY
 WASTEWATER MANAGEMENT PLAN**

DATE: OCTOBER 2011

PROJECT NO# 43504-70285 T10





Legend

- Parcel Boundary
- WMP Area
- Developed
- Undeveloped/Under Developed
- Landscape Project Area (Rank 3, 4 & 5)
- Open Space
- Open Water
- Streams

(1) Privately owned property shown as "Recreation, Conservation or Municipal" due to location in floodway.

Data Sources:
New Jersey Department of Environmental Protection

This map was developed using New Jersey Department of Environmental Protection's Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized.
USGS 7.5 minute Quadrangles - Stockton, Lambertville

MAP NO. 4-3

Buildout Analysis

**LAMBERTVILLE MUNICIPAL UTILITIES AUTHORITY
WASTEWATER MANAGEMENT PLAN**

DATE: OCTOBER 2011

PROJECT NO# 43504-70285 T10

