

TOWN OF BETHLEHEM

LOCAL WATERFRONT REVITALIZATION PROGRAM & HARBOR MANAGEMENT PLAN

Bethlehem, New York

July 2008



This document was prepared for the New York State Department of State Division of Coastal Resources with funds provided under Title 11 of the Environmental Protection Fund.

DRAFT

For Review by:
NYS Department of State

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This report was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

Introduction and Overview

Located along the western banks of the historic and famed Hudson River, the Town of Bethlehem, New York, is faced with an outstanding opportunity to fully capitalize on one of its major assets: 10 miles of riverfront. Upon preparation of the Comprehensive Plan in 2005, it was recommended that the Town develop a Local Waterfront Revitalization Program.

The Town of Bethlehem, New York has long been an attractive community in the Capital Region, recognized time and again for its superb quality of life. The Town's long history, exemplified in its natural beauty and proximity to the State Capitol, make it the envy of many communities within the Capital District of New York State. From a cultural perspective, it maintains a small town feel and sense of kinship that gets lost in many of the sprawling suburbs around the region. There are few places that remain in Bethlehem that still hold the potential to have a meaningful impact on the quality of life offered by the Town; the ten miles along the Hudson River, in many respects, are the last remaining lands for the Town to enhance the quality of life offered in the region. An appropriate balance between development and public access will be an important element for the Town as it seeks to further enhance its well-deserved reputation in the 21st Century.

The Bethlehem Local Waterfront Revitalization Program (LWRP) and Harbor Management Plan (HMP) have been developed to guide the future of Bethlehem's riverfront areas. With the recent adoption and implementation of the Comprehensive Plan, along with the Route 9W Linkage Study currently underway, the time is appropriate to fashion a new approach to the integration of Bethlehem's waterfront for the next generation of development. With a study area generally stretching from the Hudson River westward to the Thruway, the LWRP seeks to establish a vision and policies to appropriately guide future investments and development, both public and private.

The LWRP defines a framework to integrate various investments and efforts within the waterfront revitalization area boundary. In general, the LWRP looks to create a balance between future development and the protection of the unique environmental and heritage expressed along the riverfront. Preferred development areas are identified, an approach to both environmental and heritage protection is outlined and connections to regional trail systems are proposed. The plan outlines regulatory tools that will help bring about the envisioned future for the waterfront as well as an implementation schedule with some financing mechanisms for consideration. Bethlehem plays an important role to the region for commerce, culture and tourism. It is the intent of this plan to further enhance this role as a community that promotes the identity of the region while still providing for the needs of its residents.

What is an LWRP?

New York State's *Waterfront Revitalization of Coastal Areas and Inland Waterways Act* is a unique waterfront tool that encourages a local, home-rule decision-making process for waterfront management. A Local Waterfront Revitalization Program (LWRP) is a comprehensive waterfront management plan developed under the authorization of the Act by local municipalities. Bethlehem's LWRP formulates waterfront development objectives by adapting statewide legislation and policies to the unique and individual

requirements of the Town. The LWRP also outlines strategies that will complement the Town’s recently completed Comprehensive Plan and provides a Master Plan for the Henry Hudson Park.

The LWRP process involves cooperation with State, County, local, and private agencies as well as an appointed LWRP Advisory Committee that includes local business owners, municipal, and state officials and Town of Bethlehem residents. The LWRP outlines specific projects and policies to encourage environmental protection, foster economic development, protect valuable water resources, and improve public waterfront accessibility. The LWRP will enable Bethlehem officials to play a role in determining that federal, state and local actions proposed within the waterfront revitalization area is conducted in a manner consistent with the policies of the LWRP and the vision of the community.

One of the components of the LWRP is the identification of long-term uses and specific projects along the waterfront and related lands. These uses and projects, in conjunction with an established management program, significantly increase Bethlehem’s ability to attract and manage development activities that complement the unique cultural and natural characteristics of its waterfront. Projects proposed within this document will create a new waterfront destination for both residents and visitors to the Town.

The LWRP provides Bethlehem with the local controls to guide waterfront-related development. More importantly, the LWRP is designed to establish a process to ensure that *all* actions proposed for the Town’s waterfront area occur in a fashion prescribed by the LWRP. This “consistency” provision is a strong tool that is intended to create dialog and encourage cooperation between federal, state and local governments, as well as private sector interests, to build a stronger economy and a healthier waterfront environment.

A Vision for Bethlehem’s Riverfront Areas Statement

In the year 2020, Bethlehem’s Riverfront Areas, as defined by the Town’s Local Waterfront Revitalization Program, are a peaceful, safe and desirable destination that provide enhanced connectivity and access to the riverfront for all people to live, work, recreate, and experience history, culture and the environment in beautiful and inspiring spaces that respect our natural resources and heritage for future generations.

Value Statements

The residents of Bethlehem expressed a relatively consistent premise to build on the assets that already exist in the riverfront areas and to enhance Bethlehem’s already high quality of life. Balance was a consistent theme. The following themes capture the views expressed on important issues regarding the riverfront areas. These value statements should be used as a guide for decision-making when evaluating policies, programs and projects within the Riverfront areas.

Sense of Place: The riverfront areas will continue to be a special place in Bethlehem; they are the connection between town and river. They are places where residents will experience the beauty and diversity of Bethlehem. The riverfront areas will be developed within the context of Bethlehem’s history and heritage. The quality of architecture and design elements will enhance and interpret this unique sense of place.

Recreation, Connectivity & Access: The riverfront areas will be available from both the land and the water. Multi-use recreational amenities will be accessible with safe, integrated connections that allow people to fully experience Bethlehem’s riverfront areas. Diverse events and attractions will allow people of different ages and abilities to get a full riverfront experience.

History and Heritage: The riverfront areas should be an important expression of the rich history of both the Town and the region. This history and heritage is important to interpret for future generations to understand the roots of the Capital Region. The heritage buildings, artifacts and historic traces of the riverfront areas express the richness of how the community was created and used. Opportunities for interpretation should be expressed in all new development that occurs within the riverfront areas.

Stewardship: The ecological value of the riverfront areas should be maintained and restored in all projects. Unique habitats should be protected. Opportunities to connect with and interpret the environment should be appropriately included in all projects. Unique and special scenic viewing areas should be respected and opportunity should be provided for all to experience these areas. Efforts should be made with our regional community partners to improve the environmental integrity of the Hudson River.

Growth and Development: The riverfront areas are places to live, work, and recreate with a wide diversity of uses and a range of visually interesting experiences. To reflect the diversity of its users, there should be a range of fiscally responsible built and “green” environments and opportunities appropriately designed and located for passive and active uses.

Regional Coordination: As the Capital Region and Hudson River Watershed communities continue to grow and evolve, it will be important that all projects be evaluated within a regional context, especially the nearby waterfront communities of Troy, Albany, Rensselaer, East Greenbush, Castleton-On-Hudson, Coeymans and Schodack.

Section 1

Section 1 – Waterfront Revitalization Area

Description of Existing Coastal Boundary

Bethlehem's Coastal Area Boundary is defined by Section 1455(d)(2)(A) of the Coastal Zone Management Act of 1972 administered by National Oceanic and Atmospheric Administration, National Ocean Services, Office of Coastal Resources Management. Generally, the boundary follows well-defined features such as roads, railroads or shorelines as defined in 19 NYCRR Part 602, unless otherwise indicated.

Beginning at the southern municipal boundary, the Coastal Area Boundary follows Route 144 north to its intersection with Barent Winne Road; thence east following Barent Winne Road to its terminus; thence north generally following the shoreline to Wheeler Road; thence west to its intersection with Route 144; thence north along Route 144 to its intersection with Bask Road; thence west to its intersection with the existing rail line; thence northeast following the rail line to a point generally north of Smultz Road; thence directly north to its intersection with Glenmont Road and Anders Lane; thence east following Anderson Lane to its intersection with Route 144; thence north following Route 144 to the northern municipal boundary with the city of Albany, this being the end point of the described line.

Description of Proposed Waterfront Revitalization Area Boundary

The Town of Bethlehem Waterfront Revitalization Area (WRA) shall be composed of the following described areas within the Town. The WRA shall include all lands west of the Town's eastern municipal boundary, which is the centerline of the main channel of the Hudson River, with the following delineation:

Beginning at the southern municipal boundary, the WRA begins at the eastern edge of Interstate 87; thence continuing north following the eastern edge of Interstate 87 to the northern municipal boundary with the City of Albany, this being the end point of the described line. The proposed boundary expansion would represent nearly 4,000 acres of additional land within the Town of Bethlehem.

See Waterfront Revitalization Area Map following Page 1.2.

Justification for Amendment to the Existing Coastal Boundary

As noted above, the existing Coastal Boundary generally follows well-defined features such as roads, railroads or shorelines as defined in 19 NYCRR Part 602. The proposed boundary has been expanded to include areas further inland because the overall goal of this LWRP is to facilitate enhanced connections to the waterfront; the expanded areas influence future waterfront connections. While the existing boundary provides for a very focused area to concentrate LWRP efforts, it does not allow the Town to develop

programs and projects within the areas that will be most affected by waterfront-related development. The proposed boundary allows for broader community-wide revitalization resulting from waterfront investments.

Waterfront Revitalization Area



WATERFRONT REVITALIZATION BOUNDARY

Local Waterfront Revitalization Program

November 2007

KEY

- COASTAL BOUNDARY
- TOWN BOUNDARY
- PROPOSED LOCAL WATERFRONT REVITALIZATION PROGRAM BOUNDARY
- COUNTY BOUNDARY
- WATER BODIES



PROJECT # 2006 - 06127.10P
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TOWN OF BETHLEHEM

Section 2

Section 2 – Inventory and Analysis

2.1 REGIONAL SETTING AND OVERVIEW

The Town of Bethlehem is comprised of the Hamlets of Delmar, Elsmere, Slingerlands, Glenmont, Selkirk, and North and South Bethlehem, and is located on the western banks of the Hudson River in Albany County, New York. The Town of Bethlehem is conveniently situated just south of the City of Albany, and the Town of Guilderland. The Town of New Scotland lies to the immediate west, and the Town of Coeymans to the south. The Towns of Schodack and East Greenbush are located directly opposite Bethlehem, on the eastern banks of the river.

Several major roads traverse the Town, one of the most important being the New York State Thruway (I-87), which runs north and south direction through the Town and defines the western edge of the study area. New York State Route 9W is located just west of the Thruway. The only other major route that lies completely within the project area is New York State Route 144, which runs parallel to the Hudson River. County Routes 43, 85 and 433 run east and west through the northern half of the Town, while Route 396 runs east and west through the southern portion of the Town.

The Town's strategic location, coupled with significant natural resources, working agricultural landscapes, quality schools, and the emerging technology industry in the region have allowed the Town of Bethlehem to become one of the region's most desirable communities. As a result of this esteemed quality of life, the Town has faced increasing growth pressure over the past several decades. This growth pressure, along with the desire to preserve and enhance the Town's quality of life and to balance the environmental and economic sustainability, has led to the recommendation to develop a Local Waterfront Revitalization Program (LWRP). Bethlehem has prepared this LWRP in the hopes of ensuring that the community remains an attractive place for residents, and that its economy remains competitive, both locally and regionally.



2.2 HISTORY

Life and the economy have always centered on the 315 miles of the Hudson River. The Hudson is one of the nation's most important waterways, serving as a historic commercial corridor. The first civilized humans believed to roam what is now the Town of Bethlehem were the Native American clans who formed the Mohawk tribe of the Five-Tribe Confederacy of the Iroquois Nations. The Iroquois, or Haudenosaunee, whose mastery of diplomacy, representative democracy, and political unity was a model for the United States government, were able to make great use of the Hudson River's natural resources. The riverside area may have archaeological resources dating from this era.

In 1609, Henry Hudson became the first European to explore what is now the Hudson River between the New York Harbor, and north into present day Albany. It is believed that Hudson landed his ship, the *Half Moon*, at what is now the Henry Hudson Park in the Town of Bethlehem. Hudson's travel has forever changed the landscape of the eastern portion of New York State. Shortly after Hudson's ship landed in Bethlehem, European migration began. The earliest growth occurred in Normansville, where many Scandinavians situated along the Normanskill Creek.

The Abbey Hotel was constructed in present day Bethlehem in the early 1700s. The Hotel acted as a halfway point for travelers along the Hudson River between the Port of Albany and the popular Van Wie Point. The Abbey Hotel, along with other hotels that were later constructed, served as the center of activity for travelers, politicians and local clubs in the Town. In 1807, regular commercial steamboat service began along the Hudson River between New York and Albany. The Erie Canal was created soon thereafter, in 1825, which enabled travel between the New York Harbor, north to Albany and then west to Lake Erie in Buffalo. Travel became more reliable and efficient over the next several decades, with new modes of travel and technology enabling the exchange of commodities along with residential growth along the waterways.

The Town of Bethlehem was incorporated from the Town of Watervliet in 1793, with the name Bethlehem adopted from the biblical town. In 1832, the Town of New Scotland was formed from the western sections of the Town of Bethlehem. Bethlehem's earliest growth occurred along the Normanskill Creek, which serves as the border between the Town and the City of Albany. In the mid 1800s, the Delaware and Hudson railroad began servicing the Hamlet of Delmar (formerly known as Adamsville). This rail line spurred much growth into the Town throughout the 1960s, when the passenger service was discontinued. The renowned Hudson River was designated an American Heritage River in 1998. It is currently one of 14 designated American Heritage Rivers in the nation.

2.3 REVIEW OF RELATED STUDIES

The Town of Bethlehem, the Hudson River, and the Capital District on the whole have been the subjects of a number of studies over the decades. The following were reviewed in preparation of this LWRP planning process:

-
- > Town of Bethlehem Comprehensive Plan and Generic Environmental Impact Statement (2005) contains recommendations for land use, transportation and community facilities and infrastructure.
 - > Bethlehem Tomorrow Booklet about Questions and Answers about the Town (2003)
 - > Rural Landowners Report (1997)
 - > Survey of Historic Resources (1996)
 - > Land Use Management Advisory Committee Study (1994)
 - > Route 9W Corridor Report (1989)

2.4 COMMUNITY FACILITIES AND SERVICES, TRANSPORTATION AND INFRASTRUCTURE

School Systems

The Town of Bethlehem offers a revered school system that is widely known for excellent academic achievement among students in the district. There are three school districts within the Town of Bethlehem: Bethlehem Central School District, Ravena – Coeymans – Selkirk Central School District and a small portion of Guilderland Central School District. Of these, the Bethlehem Central School District serves students residing within the northern portion of the WRA (roughly north of Wemple Road), whereas the Ravena – Coeymans – Selkirk Central School District serve students residing within the southern portion of the WRA (roughly south of Wemple Road).

Police, Fire and Emergency Services

The Town of Bethlehem has several police, fire and emergency services prepared to assist those in need. The Town Police Department aims to provide a very high standard of law enforcement and public safety services to the people of the community in a professional, compassionate and cost-effective manner. The Town Police Department is located in Delmar, at 447 Delaware Avenue. On a larger scale, State Trooper Division G serves Albany County, as well as Fulton, Hamilton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren and Washington counties. The Division State Troopers Headquarters is located in Loudonville, with other nearby zone stations located in Schodack, Guilderland and New Scotland.

Many of the fire and emergency services are volunteer-driven. There are several fire departments serving the Town of Bethlehem, including the Delmar Fire Department, North Bethlehem Fire Department, Elsmere Fire Company A, Slingerlands Fire Department, Selkirk Fire District #1,

¹ Income Characteristics for the Waterfront Revitalization Area were not available at the block group level in the 2000 Census. Therefore, the figures represent income characteristics for Census Tract 143.01 only, rather than an average of the entire Waterfront Revitalization Area.

² The U.S. Census relies on their survey and interview respondents to report the year structures were built. Therefore, data are susceptible to errors of response and nonreporting since respondents must rely on memory or other estimates by people who have lived in the neighborhood a long time.

³ Median indicates a value in an ordered set of values below and above which there is an equal number of values. In the case of the Town of Bethlehem: half of the housing units were built before 1971 and half were built after 1971.

Selkirk Fire District #2. In addition, the Bethlehem Volunteer Ambulance Service and the Western Turnpike Rescue Squad also provide services. There is only one fire department that is located within the WRA, in Selkirk. An ambulance station is also located near the WRA, at the corner of Lasher Road and Route 9W.

Transportation and Access

One of the most pressing issues facing waterfront development is access. Planning for the waterfront must consider the different needs for access and examine regional routes that provide connections and service within the WRA. There are several major roads within the Town that provide easy access to points north and south of the WRA, including NYS Route 9W, the New York State Thruway, and NYS Route 144. However, routes providing access to points west (out of the WRA), and east (into the WRA) are limited to NYS Route 32, Wemple Road, Clapper Road, Beaver Damn Road and NYS Route 396.

This issue has been thoroughly investigated since 1989 when the Route 9W Corridor Study recommended that a bypass road be constructed around Selkirk to minimize truck traffic and to facilitate access between the New York State Thruway and points east into the Town's industrial core. The issue of providing a bypass has remained under continuous examination over the past several years, but has yet to be finalized.

While the primary means of transportation for those residing in and visiting the WRA is the automobile, several other modes of transportation are available. Capital District Transportation Authority (CDTA) provides public transit service on Bus Routes 7 and 8 between Glenmont and Downtown Albany⁴. The stops are outlined below:

- > Corning Hill Road and South Pearl Street
- > Kmart/Price Chopper at Town Squire Shopping Center
- > Wal-Mart
- > Corning Hill Road

CDTA also promotes and provides service to many points of interest throughout the Capital District. Points of interest include libraries, museums, public parks, and tourist attractions such as Elm Avenue Town Park in Delmar, Hudson River Way at the Corning Riverfront Park, Captain J.P. Cruise Lines in Troy, and the RiverSpark/Hudson-Mohawk Urban Cultural Park in Troy. Adirondack Trailways also operates peak hour service along State Route 9W. Every bus is equipped with a rack that can transport two bicycles.

⁴ As of September 24, 2006

Infrastructure

The capability of the sewer and water systems within the WRA to accommodate future development is of utmost importance. Public water and sewer do not serve a large portion of the WRA. As seen in the accompanying map, only 51.5% of the parcels (433 parcels) within the WRA are served by public water, and 27.4% of the parcels (230 parcels) within the WRA are served by public sewer. Many of the remaining areas use individual septic systems. Given the soil conditions (further discussed in Section 2.13) throughout much of the project area, the WRA may be prone to more system failures than other areas throughout and outside of the Town.

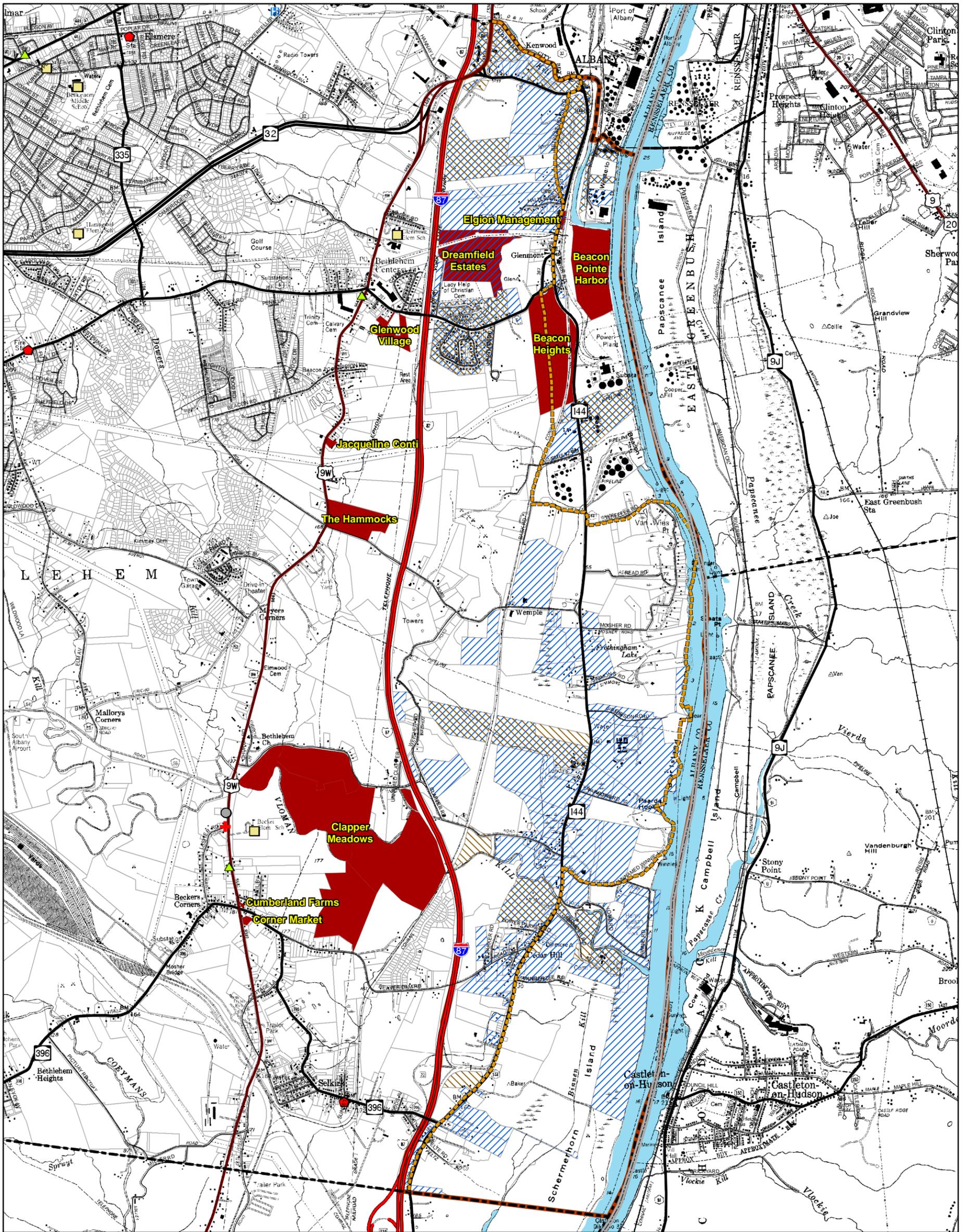
Pipeline Projects

There are several projects in the pipeline within the WRA. These include Dreamfield Estates, Glenwood Village, and Beacon Pointe Harbor and Beacon Heights in the northern portion of the WRA, as well as The Hammocks along Wemple Road, and Clapper Meadows, which comprises a large tract of land straddling Clapper Road. Several smaller projects are also in the pipeline, scattered throughout the WRA. If and when these are constructed, such projects along with other future development will have a significant impact on the overall aesthetics, quality of life and sense of place to those who reside in and visit the Waterfront Revitalization Area. The addition of new residents means the potential for more customers for local businesses and more vibrant public and community spaces; however it could also bring traffic congestion and more pressure on community services and environmental resources.

In addition to the projects proposed within the Town of Bethlehem, it is important to understand regional waterfront projects as well. Three major projects are proposed within the region in the cities of Rensselaer, Troy and Schenectady. Rensselaer is currently reviewing a project known as the Half Moon Harbor, which is proposed as a mixed-use redevelopment at the current high school site. The intent of Half Moon Harbor is to create a significant waterfront destination with a promenade along the river's edge, parks, a marina, and condominiums, commercial space and professional offices. In Troy developers intend to recreate a 25-block area along the waterfront into the Hedley District, which is proposed to include a 7-story hotel with new office space condos, stores and parks along the riverfront. Schenectady is currently engaged with a developer to redevelop the former American Locomotive Company site along the Mohawk River as a mixed-use residential/professional/commercial site with connections to a regional trail network and a waterfront promenade. In total, these three projects include roughly \$850 million of investment to the region's urban waterfront areas to bring more than 1500 new residential units, 165,000 square feet of new commercial/retail space and 890,000 square feet of new professional office space.



Pipeline Projects Map



PIPELINE PROJECTS

Town of Bethlehem
Local Waterfront
Revitalization Program

June 2007

KEY

- AMBULANCE
- FIRE STATION
- POST OFFICE
- TOWN HALL
- HOSPITAL
- LIBRARY
- POLICE
- SCHOOL
- COASTAL BOUNDARY
- Town Boundary
- COUNTY BOUNDARY
- WRA BOUNDARY
- PARCEL WITH PUBLIC SEWER
- PARCEL WITH PUBLIC WATER
- PIPELINE PROJECT
- HUDSON RIVER



PROJECT # 2006 - 06127.10P
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TOWN OF BETHLEHEM

2.5 EXISTING LAND USES

This organization of property into land use classifications allows for the breakdown and comparison of the local tax base composition. Although there may not be a large number of parcels in the Town of Bethlehem, the assessed valuation may be high, thus contributing greatly to the Town’s tax base. As seen in the charts below, residential parcels comprise the majority, with 79.8% of all parcels in the Town, but only 64.0% of the total assessed valuation. Likewise, 4.7% of all parcels in the Town are for commercial use, yet commercial parcels make up 10.3% of the total assessed valuation in the Town. Whereas recreation and entertainment, community service, agricultural, industrial and public service properties, and land for public parks, wild, forested and conservation combine to constitute a mere 3.0% of the Town’s parcels, these six land use classifications combine to comprise 24.6% of the local tax base.⁵

Likewise, residential parcels comprise the majority of the WRA, with such land use totaling 62.4% of all parcels in the WRA, yet only 36.5% of the total assessed valuation. However, the residential composition of the WRA is much less dominant – in terms of both the percentage of parcels and the composition of the local tax base – when compared to the rest of the Town. This indicates that residential land within the WRA is situated quite differently than it is throughout other parts of the Town. This can be attributed to the rural character that is much more prevalent throughout the WRA when compared to the Town as a whole.

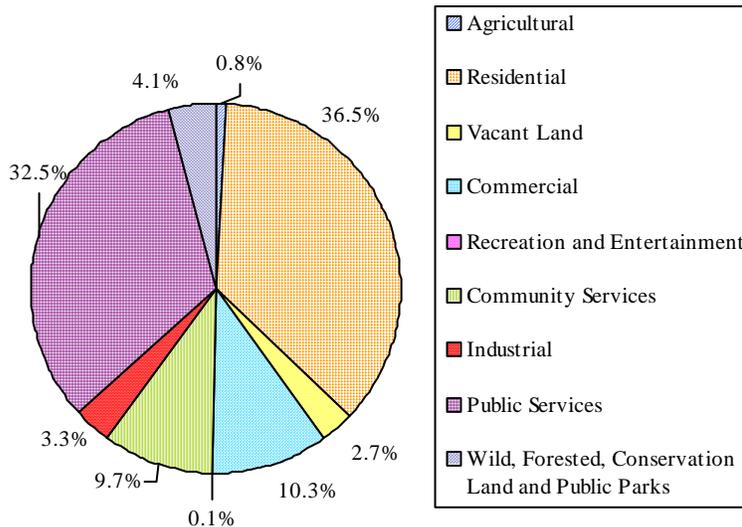
Moreover, there are 17 parcels of land designated for public services, yet the assessed valuation of this land use comprises almost 1/3 of the assessed valuation within the WRA. When coupled with the relatively greater share of land for community services and land for public parks, wild, forested and conservation, it is clear that the land use patterns are quite distinct from the rest of the Town. This reinforces the characteristics that are distinct to the WRA, and as such has implications on the types of future development that are appropriate within this part of the Town.

Assessed Valuation by Land Use Classification, Town of Bethlehem: 2005 – 2006						
(Source: New York State Office of Real Property Services; Town of Bethlehem and Albany County; Analysis made by Saratoga Associates)						
	Waterfront Revitalization Area (2006)			Town of Bethlehem (2005)		
Land Use	Number of Parcels	Total Assessed Valuation (AV)	Percent of Total AV	Number of Parcels	Total Assessed Valuation (AV)	Percent of Total AV
Agricultural	21	\$2,645,000	0.8%	87	\$9,364,850	0.4%
Residential	524	\$122,206,300	36.5%	10,460	\$1,539,788,565	64.0%
Vacant Land	171	\$9,133,250	2.7%	1,639	\$27,863,634	1.2%

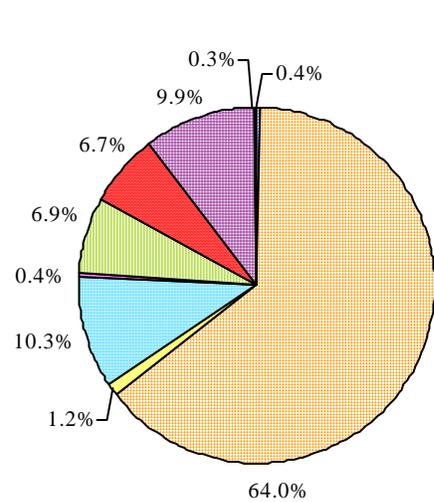
⁵ It is important to note the discrepancy between parkland classified as “recreation and entertainment” versus parkland classified as “wild, forested, conservation land and public parks.” The differences can be seen in the accompanying chart, where New York State Office of Real Property Services designates this type of land use differently than the Town of Bethlehem.

Commercial	51	\$34,413,205	10.3%	615	\$246,621,719	10.3%
Recreation and Entertainment	2	\$411,400	0.1%	26	\$9,098,400	0.4%
Community Services	10	\$32,435,201	9.7%	97	\$165,809,450	6.9%
Industrial	8	\$10,926,250	3.3%	29	\$160,956,059	6.7%
Public Services	17	\$108,650,020	32.5%	148	\$238,320,481	9.9%
Wild, Forested, Conservation Land and Public Parks	10	\$13,543,100	4.1%	14	\$7,180,600	0.3%
No Data	26	\$0	0.0%	0	\$0	0.0%
Total	840	\$334,363,726	100.0%	13,115	\$2,405,003,758	100.0%

Assessed Valuation by Land Use Classification, Waterfront Revitalization Area: 2006
(Source: New York State Office of Real Property Services)

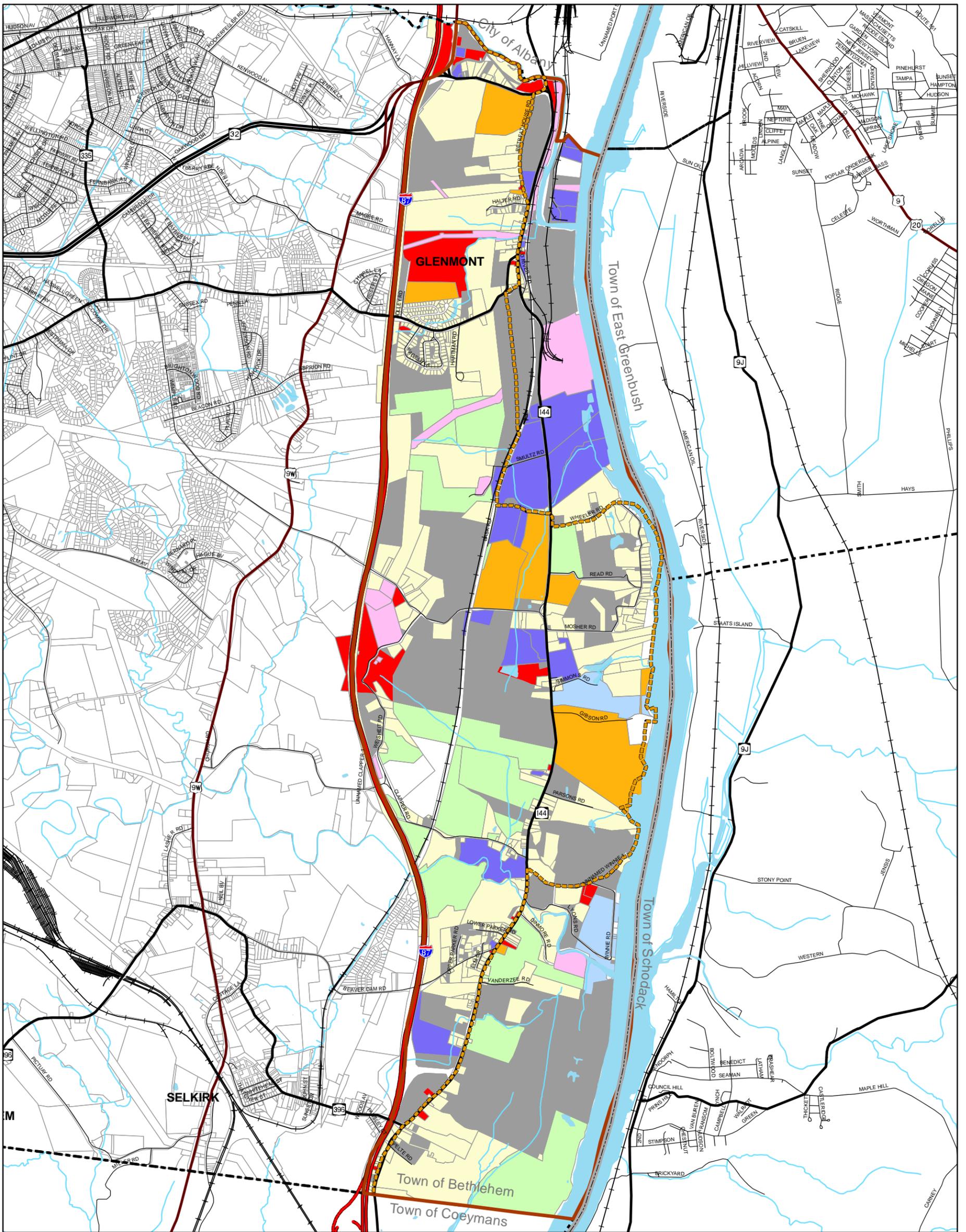


Assessed Valuation by Land Use Classification, Town of Bethlehem: 2006
(Source: New York State Office of Real Property Services)





Existing Land Use Map



EXISTING RIVERFRONT LAND USE

Local Waterfront Revitalization Program

June 2007

KEY

- COASTAL BOUNDARY
- TOWN BOUNDARY
- RIVER/STREAM
- LAND USE**
- NO DATA
- AGRICULTURAL
- COMMERCIAL
- COMMUNITY SERVICES
- FORESTED/CONSERVATION
- INDUSTRIAL
- PUBLIC SERVICES
- RECREATION & ENTERTAINMENT
- RESIDENTIAL
- VACANT

- COUNTY BOUNDARY
- WRA BOUNDARY
- PARCEL BOUNDARY
- WATER

0 1,000 2,000 4,000 Feet



PROJECT # 2006 - 06127.10P
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File Location: S:\GIS\06127\11x17_LWRP_RIVERFRONT_LANDUSE.mxd

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TOWN OF BETHLEHEM

2.6 EXISTING ZONING

It is important to note that the total acreage for the existing zoning within the Town differs from the total acreage for the existing land use in the aforementioned section. This is due to the fact that calculations for zoning include roadways and other rights of way. When measuring existing land uses, those public places are excluded.

There currently exist 17 zoning districts within the Town of Bethlehem of which 14 are present in the Waterfront Revitalization Area. There is no land zoned for multi-family residential or planned commercial or residential development within the WRA. As seen in the accompanying table, and the map on the following page, the Town is zoned primarily for residential use, with zoning classifications ‘CR’, ‘RA’, ‘RB’, ‘RC’, ‘MR’ and ‘PRD’ combining to constitute roughly 12,400 acres, or 42.1% of land within the Town. Relatively speaking, there is a smaller percentage of land zoned for residential use in the WRA. The land within the WRA, however, is primarily zoned rural, with zoning classification ‘R’ comprising almost 6,200 acres, or 25.4% of all land in the WRA. An additional 1,855 acres, or 21.4% of land within the WRA is zoned ‘RR’.

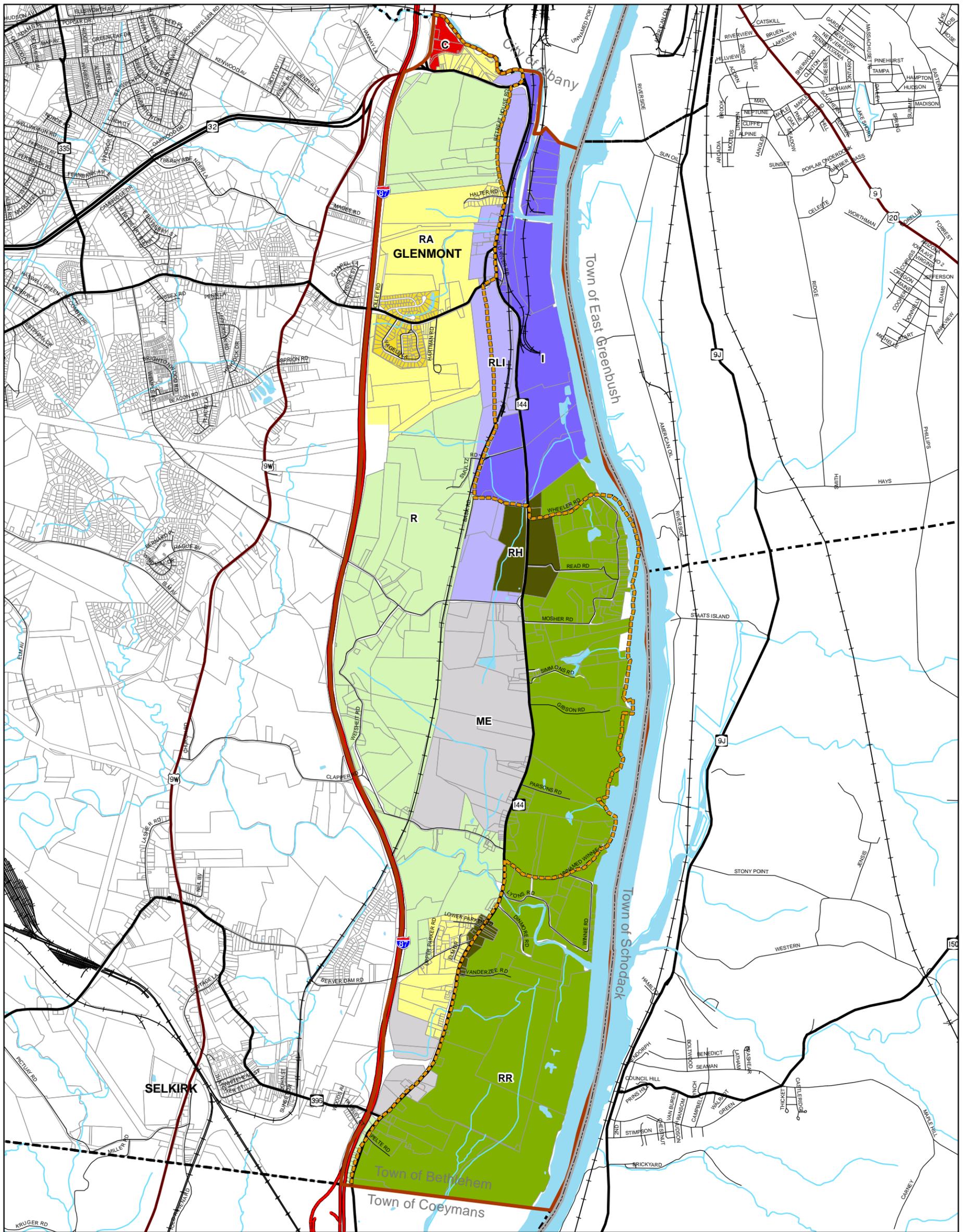
Another major difference between the WRA and the Town lies in the land zoned for Mixed Economic Development: roughly 14.7% of all land within the WRA is zoned for ‘ME’, while only 5.5% of land within the Town is zoned for this type of use. The Mixed Economic Development District requires a development master plan for parcels greater than five acres, and is generally intended for a mix of office, light industrial, manufacturing and technology-based businesses (primary uses), and service businesses, restaurants, entertainment uses, small-scale retail uses, and fitness clubs (secondary uses). In this sense, it offers the opportunity for comprehensive, thoughtful development rather than piecemeal growth that could adversely affect the WRA. Development geared towards tourism and economic development will likely be focused in districts that are designed to accommodate business and entertainment, such as the Mixed Economic Development and the Commercial Hamlet Districts. These zoning districts will be an important factor in determining the type of development that may occur within the Waterfront Revitalization Area. By concentrating desired development in areas already designated to accommodate it, the WRA’s unique scenic and environmental qualities will be preserved for residents and visitors alike, while economic development is encouraged in appropriate locations.

Existing Zoning, Town of Bethlehem: 2006				
<i>(Source: Town of Bethlehem and Albany County; Analysis made by Saratoga Associates)</i>				
Zoning District	Waterfront Revitalization Area		Town of Bethlehem	
	Polygon Count	Percent of Total Acreage	Polygon Count	Percent of Total Acreage
C- Commercial	8	1.4%	14	0.9%
CH – Commercial Hamlet	2	0.3%	29	0.6%
H – Hamlet	14	1.5%	46	1.2%

ME – Mixed Economic Development	6	14.7%	8	5.5%
CR – Core Residential	12	1.3%	253	7.5%
RA – Residential A	26	14.7%	230	29.9%
RB – Residential B	11	1.4%	29	0.9%
RC – Residential C	3	0.5%	25	0.5%
MR – Multi – Family	0	0.0%	10	0.1%
I – Industrial	6	6.9%	9	7.9%
RLI – Rural Light Industrial	10	6.7%	28	12.4%
R – Rural	24	25.4%	56	20.9%
RR – Riverfront Rural	8	21.4%	8	6.3%
RH – Rural Hamlet	17	3.8%	41	2.3%
PCD – Planned Commercial Development	0	0.0%	3	0.2%
PRD – Planned Residential Development	0	0.0%	69	3.2%



Existing Zoning Map



EXISTING RIVERFRONT ZONING

Local Waterfront Revitalization Program
June 2007

- KEY**
- TOWN BOUNDARY
 - COASTAL BOUNDARY
 - RIVER/STREAM
 - COUNTY BOUNDARY
 - WRA BOUNDARY
 - HUDSON RIVER SHP
 - PARCEL BOUNDARY
- ZONING**
- COMMERCIAL
 - MIXED ECONOMIC DEVELOPMENT
 - RES A
 - RES B
 - RURAL LIGHT INDUSTRIAL
 - INDUSTRIAL
 - RURAL
 - RIVERFRONT RURAL
 - RURAL HAMLET



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File Location: S:\GIS\06127\11X17_LWRP_Riverfront_ZONING.mxd

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TOWN OF BETHLEHEM

2.7 VISITOR AND TOURISM INFORMATION AND RESOURCES

Just as an owner of a department store tracks customer buying habits to focus efforts, a tourist community needs to study visitors and learn what they buy, what they do, as well as what they want to buy or do but cannot. By the same token, a community needs to understand how their resources can meet their customer's demands.

According to the Albany County Convention and Visitors Bureau, there exist over 6,800 rooms among 66 lodging facilities in Albany County. Two of these accommodations are located within the Town of Bethlehem, in Glenmont. The Comfort Inn Glenmont is located within the project area at 37 Route 9W, and the Econo Lodge is just outside of the project area, slightly west of Route 9W, at 15 Frontage Road.

There are several tourism resources that are available to visitors of Albany and Rensselaer counties as well as nearby Southern Saratoga County. A few of the most prominent are outlined below.

Albany County Convention and Visitors Bureau

The Albany County Convention and Visitors' Bureau is located at 25 Quackenbush Square, in the City of Albany, New York. New York State runs a visitor's center on Pearl Street in downtown Albany, as part of the I Love NY program. The Convention and Visitors Bureau is home to the Albany Heritage Area Visitors Center, a museum that displays a variety of historical exhibits. The Henry Hudson Planetarium is within the Albany Heritage Area Visitors Center, and offers both children and adults the chance to explore the sun, planets and stars. Further information is available on their website, at <http://www.albany.org/>.

RiverSpark Visitor Center

Located at 251 River Street, in Troy, New York, the RiverSpark Visitor Center is the gateway to Troy, the greater Troy area, as well as the entire Hudson – Mohawk Heritage Area. Information is available on their website, <http://www.troyvisitorcenter.org/>.

There exist numerous historical and cultural amenities both in the region. The accompanying table outlines some of the predominant amenities that are available to the general public, both residents and tourists. While none of the amenities are located within the borders of the Waterfront Revitalization Area, all amenities are located in close proximity to the area, in either Albany or Rensselaer County.

Regional Historical and Cultural Amenities: 2006 (Source: Albany County Convention and Visitors Bureau)		
Amenity	Season	Notes
Half Moon Tour Albany Riverfront Park New Netherland Museum	2007 season unavailable at time of report	Tour of a replica of the ship that Henry Hudson sailed to Albany in 1609.

Regional Historical and Cultural Amenities: 2006

(Source: Albany County Convention and Visitors Bureau)

Albany, NY		
U.S.S. Slater Destroyer Escort Historical Museum 141 Broadway Albany, NY 12202	April to November (Wednesday through Sunday)	The only destroyer escort remaining afloat in the United States. Undergone restoration and is now moored on Hudson River in Albany. Offers guided tours; youth group overnight camping; destination for naval reunion groups
Albany Aqua Ducks and Trolleys Tours depart from Albany County Convention and Visitors Bureau 25 Quackenbush Square Albany, NY	Trolley tours run February through October River tours run April through October	Amphibious historic tours of Albany, Troy and Hudson River; offers special adult and children's packages that team up local entertainment venues; each tour accommodates 42 persons, available for charter
New York State Museum 3023 Cultural Education Center Empire State Plaza Albany, NY	Year Round	Cultural and natural history of New York State
The Opalka Gallery The Sage Colleges 140 New Scotland Avenue Albany, NY	Year Round (Mon – Fri)	Art gallery with lecture/presentation hall
Albany Institute of History and Art 125 Washington Avenue Albany, NY	Year Round (Tues – Sun)	Museum dedicated to collecting, preserving, interpreting and promoting interest in history, art and culture of upper Hudson Valley region
Pepsi Arena 51 South Pearl Street Albany, NY	Year Round	Venue for professional and college sports, concerts, family shows, ice shows, etc.
Palace Theatre 19 Clinton Avenue Albany, NY	Year Round	Renowned theatre
Capital Reperatory Theatre 11 North Pearl Street Albany, NY	Year Round	Award – winning not-for-profit regional theatre
Watervliet Arsenal Museum U.S. Army's Watervliet Arsenal Watervliet, NY	Year Round	Museum dedicated to the development of the cannon and the history of America's oldest, continuously active arsenal
New York State Theatre Institute 37 First Street Troy, NY	Year Round	Professional and educational regional theatre
Rensselaer County Historical Society and Museum at the Hart – Cluett Mansion 59 Second Street	Year Round (Tues – Sat)	Non-profit, private educational organization designed to connect local history and heritage with contemporary life

Regional Historical and Cultural Amenities: 2006 (Source: Albany County Convention and Visitors Bureau)		
Troy, NY		
The Children's Museum of Science and Technology 250 Jordan Road Rensselaer Technology Park Troy, NY	Year Round	Current exhibit entitled, "Explore life along the Hudson River", allows children to explore the River's history, marine life, and natural resources.
Troy Savings Bank Music Hall 7 State St. Troy, NY	Year Round	Performance hall.

2.8 PUBLIC ACCESS AND RECREATIONAL AND BOATING FACILITIES

There are several major recreational areas within the Waterfront Revitalization Area. The Bethlehem Soccerplex is located just west of the New York State Thruway on Wemple Road. It provides for active recreation, but has no waterfront access. Henry Hudson Park on the other hand, is located in the southern portion of the Town along the riverfront. The 53-acre park offers visitors a boat launch, a picnic area, a playground, and several fields and courts for active recreation. The 4.1- acre Selkirk Town Park is located in the southern portion of the WRA, and the 24.6- acre Simmons Road Park is located along the Hudson River on Simmons Road.

The following table lists public and private marinas that offer moorage, storage and repair facilities to boaters.

Regional Recreational and Boating Facilities: 2006		
Facility	Season	Notes
Henry Hudson Park Off Lyons Road on Route 144 Bethlehem, NY	Park open year round Docks open year round (barring extreme weather conditions)	State – owned launch, run by DEC at Town – designated park along Hudson River, concrete ramp, parking available for 35 cars and trailers, picnic area, softball field, volleyball court, playground and more
Hudson River Way Albany Riverfront Park Pine Street and Broadway Albany, NY	Year Round	Riverfront park and walkway for pedestrians and bicyclists along banks of the Hudson River
Corning Preserve Launch Colonie Street, off Route 787 Albany, NY	Year Round (unmanned, no gate)	State – owned launch, run by ORPHP along Hudson River, concrete ramp, parking available for 15 cars and trailers.
Albany Aqua Ducks and Trolleys Tours depart from Albany County Convention and Visitors Bureau	Trolley tours run February through October River tours run April	Amphibious historic tours of Albany, Troy and Hudson River; offers special adult and children's packages that team

Regional Recreational and Boating Facilities: 2006

Facility	Season	Notes
25 Quackenbush Square Albany, NY	through October	up local entertainment venues; each tour accommodates 42 persons, available for charter
Scarano Boat Building, Inc. 194 South Port Road Albany, NY	Information unavailable at time of report	Information unavailable at time of report
Riverfront Park Broadway at Dunn Memorial exit Rensselaer, NY	Year Round	City-designated park on Hudson River
Albany Yacht Club 73 Broadway Rensselaer, NY	Information unavailable at time of report	Information unavailable at time of report
Off Route 144 Coeymans, NY	Year Round (unmanned, no gate)	State – owned launch, run by DEC along Hudson River, concrete ramp, parking available for 40 cars and trailers
Coeymans Landing Marina 20 Marina Drive Coeymans, NY	Launch open April – November	85- slip marina; public boat launch next to dock; restaurant; shop; mechanics
Castleton Boat Club 92 South Main Street Castleton, NY	Information unavailable at time of report	Private boat club
Lansingburgh Boat Launch Route 4 north from Troy Lansingburgh, NY	Information unavailable at time of report	State – owned launch, run by Canal Corp., along Hudson River, concrete ramp, parking available for 10 cars and trailers
Shady Harbor Marina Route 144 New Baltimore, NY	Information unavailable at time of report	Dock space available for 110 boats; Ship’s store; Boat House Restaurant; Free cable TV hookup, water hookup, electricity, and free pump-out service at docks; In-ground pool with deck chairs for use; Bathhouse with private showers; Coin operated washer and dryer
Finks Marina Coeymans, NY	Information unavailable at time of report	Information unavailable at time of report
Coxsackie Boat Launch Coxsackie Yacht Club Coxsackie, NY	Information unavailable at time of report	Information unavailable at time of report
Van Schiack Island Marina Cohoes, NY	Information unavailable at time of report	40 wet slips, 12 transient slips, gas, diesel, pump out, dump station, restrooms, haul out, boat & motor repair
Peebles Island State Park Waterford, NY	Year Round	State Park at Mohawk and Hudson Rivers; headquarters of Bureau of

Regional Recreational and Boating Facilities: 2006		
Facility	Season	Notes
		Historic Sites and Bureau of Historic Preservation Field Services. Amenities include a visitors' center, beach, picnic tables with pavilions, hiking and biking paths, fishing, cross-country skiing, snowshoeing
Papscanee Island Boat Launch Staats Island Road East Greenbush, NY	Information unavailable at time of report	Information unavailable at time of report
Rensselaer Boat Launch Forbes Street Rensselaer, NY	Year Round (unless ramp is pulled out due to weather)	State – owned boat launch, run by the City of Rensselaer along Hudson River, hard ramp surface, parking available for 8 cars and trailers and 20 cars
Schodack Landing Boat Launch 1 Schodack Landing Way Schodack, NY	Memorial Day through Columbus Day	State Park with 7 miles of waterfront along Hudson River and Schodack Creek; Amenities include state – owned boat launch run by OPRHP at Schodack Island; concrete ramp, parking available for 65 cars and trailers and 5 cars; bird conservation area, 8 miles of multi-use trails, bike trail, ice skating, snowshoeing, playing fields, fishing, volleyball nets, horseshoe, picnic tables, grills
Troy Motor Boat and Canoe Club 763 1 st Avenue Troy, NY	Information unavailable at time of report	Information unavailable at time of report
Troy Town Dock and Marina 427 River Street Troy, NY	Information unavailable at time of report	Information unavailable at time of report
Erie Champlain Boat Company 142 Van Wies Point Glenmont, NY	Boat tours May to October	Canal boat rentals/cruises/charters
Captain J.P. Cruise Line, Inc. 278 River Street Troy, NY	Year Round	600 – passenger luxury dinner and entertainment cruise vessel
Dutch Apple Cruises 141 Broadway Albany, NY	Year Round	149 – passenger scenic and historic Hudson River cruise

Numerous rowing clubs and teams exist throughout the region, providing active recreational opportunities and competition along the Hudson and Mohawk Rivers and several other creeks and tributaries throughout the Capital District. These rowing clubs and teams include:

- > Albany Rowing Center: Albany, NY
- > Aqueduct Rowing Club: Niskayuna, NY
- > Irish Rowing Club: Albany, NY
- > Burnt Hills Rowing Association: Burnt Hills, NY
- > Saratoga Rowing Association: Saratoga Springs, NY
- > University at Albany: Albany, NY
- > Rensselaer Polytechnic Institute: Troy, NY
- > Union College: Schenectady, NY
- > Skidmore Community Rowing: Skidmore College, Saratoga Springs, NY
- > Emma Willard School: Troy, NY
- > Shaker Rowing Association: Shaker Central School District, Colonie, NY
- > Schenectady Rowing Club: Schenectady High School, Schenectady, NY
- > Niskayuna Crew: Niskayuna Central School District, Niskayuna, NY
- > Scotia – Glenville Rowing Association: Scotia – Glenville Central School District, Glenville, NY
- > Shenendehowa Crew: Shenendehowa Central School District, Clifton Park, NY

2.9 HISTORICAL RESOURCES

There exist 11 sites within the Town of Bethlehem that are registered with New York State and/or the National Register of Historic Places. However, only four of these sites are within the Waterfront Revitalization Area.

The Bethlehem House, also referred to as the Nicoll-Sill House, was established in 1735. It is the oldest family structure in the Town of Bethlehem. The property is located off of New York State Route 144, near the Henry Hudson Park in the southeastern portion of the Town. The Bethlehem House was sold to a private developer where it was restored, and then designated as a Historic Place in 1980. District School No. 1 is located at 1003 River Road (Route 144), where it intersects Clapper Road. The Schoonmaker House is located in-between New York State Route 9W and the New York State Thruway in the southern portion of the Town.

New York State and National Registers of Historic Places, Town of Bethlehem: 2006 (Source: New York State Historic Preservation Office)		
Name	Address	Listing Date
Bethlehem House	Dinmore Road, Cedar Hill, Selkirk, New York	June 23, 1980
District School No. 1	1003 River Road (New York Route 144), Cedar Hill, Selkirk, New York	April 2, 1998
Schoonmaker House	283 Beaver Dam Road, Beckers Corners vicinity, New York	October 15, 2001
First Reformed Dutch	US Route 9W, Bethlehem vicinity, New York	November 12, 2002

New York State and National Registers of Historic Places, Town of Bethlehem: 2006		
(Source: New York State Historic Preservation Office)		
Church of Bethlehem		

Historic resources may be affected by the Hudson River PCB dredging (further detailed in Section 2.12: Navigation and Dredging Issues). In order to assess the potential damages, the Environmental Protection Agency (EPA) has conducted a Cultural Resources Survey in compliance with Section 106 of the National Historic Preservation Act. The survey reviewed all cultural and historic resources that are listed or eligible for listing on the National Register of Historic Places in Albany, Rensselaer, Saratoga, Warren and Washington counties. The survey found 32 historic resources listed on the National Register, and 113 historic resources eligible to be listed on the National Register that are located within 2,000 feet of the Hudson River in Albany County alone. None of these historical resources, however, are located within the Town of Bethlehem, and should not be affected by the dredging process in the years to come.

2.10 SCENIC RESOURCES

Scenic Areas of Statewide Significance (SASS) are areas designated by the New York State Department of State Division of Coastal Resources as unique landscapes that are accessible to the public and recognized for their [scenic quality](#). Designation affords special protection from potentially adverse federal or State actions that could impair the scenic quality of the SASS. Additional protection of SASS can be afforded by municipalities that prepare Local Waterfront Revitalization Programs (LWRP). Local land use authority is an important tool for the protection of scenic resources. In communities with an approved LWRP all three levels of government - federal, State and local - are working toward a common goal. Most current LWRPs already address the protection of scenic landscapes to some degree.

Offered by the New York State Office of Parks, Recreation, and Historic Preservation, the New York State Heritage Area System (formerly known as the Urban Cultural Park System) is a state-local partnership established to preserve and develop areas that have special significance to New York State. From the Great Lakes to the eastern tip of Long Island, the Heritage Areas encompass some of the state's most significant natural, historic, and cultural resources, as well as the people and programs that keep them vital. Each Heritage Area is required to develop a comprehensive management plan that incorporates a collective vision, realistic goals and objectives to carry out this vision, and tools for preservation, interpretation and promotion of heritage resources. The entire Bethlehem WRA is located within the Mohawk Valley Heritage Corridor, along with all communities within Oneida, Herkimer, Montgomery, Fulton, Schenectady, Schoharie, Saratoga and Albany counties (excluding land within the Adirondack Park boundary). While the Heritage Area is not specifically “protected” per se, it is an important tourism, scenic, and historic resource and should be noted as such when developing a strategy for the Bethlehem WRA.

Of course, there may be other aesthetic resources of local importance that are currently undesignated. Under the Local Waterfront Revitalization Program, local communities have the opportunity to designate such scenic resources. Parks, vistas along roadways, and other scenic resources should be inventoried and formalized as a recommendation in this Local Waterfront Revitalization Program. A comprehensive approach should be undertaken to protect the special visual characteristics that give the WRA a distinctive sense of place, especially in the increasingly urbanizing Town of Bethlehem.

2.11 NAVIGATION AND DREDGING ISSUES

The General Electric Company (GE) is responsible for discharging as much as 1.3 million pounds of polychlorinated biphenyls (PCBs) from its capacitor manufacturing plants at their Hudson Falls and Fort Edward facilities into the Hudson River between roughly 1947 and 1977. These PCBs are extremely durable industrial products, and as such, they remain in the river sediment. Many health risks are associated with the River's contamination, most notably bioaccumulation of PCBs into the food chain, culminating with the accumulation of PCBs in the human body through eating contaminated fish. PCBs are carcinogens and are linked to other adverse human health effects such as low birth weight, thyroid disease, reproductive problems, and learning, memory and immune system disorders. As a result, many recreational and commercial fisheries have been closed and advisories have been issued by the New York State Department of Health to restrict the consumption of fish and crabs caught in the Hudson River (current advisories are detailed in Section 2.14: Water Quality).⁶

As a result of the PCB contamination of the Hudson River, it was designated as a Superfund site in 1984, meaning that the United States Environmental Protection Agency has enacted a program and/or funding mechanisms to clean up such sites and to compel responsible parties to perform cleanups or reimburse the government for EPA-lead cleanups. The Hudson River PCBs Superfund Site encompasses approximately 200 miles of the Hudson River, spanning from Hudson Falls, New York in the north to the Battery in New York City in the south. The remediation process encompasses two phases: in early 2008, the EPA approved Phase 1 of the cleanup (which includes the design and construction of cleanup and treatment facilities and habitat reconstruction), as well as the Phase 2 (identifying dredging areas). As a result, GE will construct a sediment transfer/processing facility in Fort Edward, New York and perform the first phase of the dredging of the PCB-contaminated river sediments. According to the latest statement released by the EPA, the start date for dredging has been

⁶ United States Environmental Protection Agency, <http://www.epa.gov/hudson/>

extended until the spring of 2009. This adjustment is due in large to the delay caused by the legal challenge to the agreement with GE to conduct the cleanup⁷.

2.12 TOPOGRAPHY AND GEOLOGY

The Town of Bethlehem has areas of limestone soils, which can lead to the formation of karst topography. These areas are most notable in the southern portion of the Town. Limestone has a high calcium carbonate content and is easily dissolved by underground water. When dissolved, underground caves and channels result. This resulting topography, karst topography, often leads to the development of sinkholes, or dolines, which are depressions that are formed when the underlying limestone is eroded. As a result, areas with karst topography are potentially unstable for the purposes of development.

2.13 WATER QUALITY

The Hudson River flows along the eastern edge of the Town of Bethlehem, extending north into the Adirondacks and south into the New York Harbor. Between the Adirondacks and New York City, the River is a classified C waterway by the New York State Department of Environmental Conservation. NYSDEC classifies its waterways as follows, based on existing or expected best usage of each water or waterway segment.

- > The classification AA or A is assigned to waters used as a source of drinking water.
- > Classification B indicates a best usage for swimming and other contact recreation, but not for drinking water.
- > Classification C is for waters supporting fisheries and suitable for non - contact activities.
- > The lowest classification and standard is D.⁸

The New York State Department of Health (DOH) issues advisories on eating sportfish because some of these foods contain chemicals at levels that may be harmful to health. Fishing use along the Hudson River throughout the WRA is impaired by a fish consumption advisory on Alewife, blueback herring, rock bass and yellow perch (eat no more than one meal per month), and American shad (eat no more than one meal per week). New York State Department of Health recommends that all other species found within this portion of the Hudson River should not be eaten due to PCB contamination.

The same situation applies to swimming in the Hudson River along the WRA. Although from the nineteenth to the early twentieth centuries, the River was widely used for swimming, worsening water quality conditions through the mid-twentieth century resulted in public health and liability issues that

⁷ ***“Ground-Breaking for Construction of Hudson River Cleanup Facility Set for the Spring: Dredging Schedule Extended,”*** United States Environmental Protection Agency, February 8, 2007, <http://www.epa.gov/udson/>

⁸ <http://www.dec.ny.gov/permits/6042.html>

kept swimmers out of the Hudson. By the 1960s, government officials began to address a host of environmental issues, including water quality, allowing for the consideration of expanding opportunities for public swimming in the Hudson River. In 2005, a report was prepared for the Hudson River Estuary Program and New York State Office of Parks, Recreation and Historic Preservation, that in part identified eight places along the river where swimming could potentially take place in the future with continuing improvements in water quality. One of these potential new sites was Henry Hudson Park, which is situated within the WRA. The park has been identified as potentially feasible but in need of significant additional action. In order for the Park to be established as a beach, it would be necessary to change the state water quality classification from C to B, which permits primary and secondary contact recreation and fishing, and are suitable for fish propagation and survival. Currently, the Hudson River's water quality is primarily affected by a number of large-scale factors: industrial pollution, wastewater treatment facilities, and runoff. Such factors could be—and have been continually, in recent years—addressed through policy and land use decisions. However, according to NYSDEC, site-specific water quality analyses, such as potential sources of chemical contamination, including the potential for runoff, are recommended in order to assess the feasibility of any public swimming facility. Given the necessary investments and actions in analyses and facility needs, it is possible that the Henry Hudson Park could provide a public beach to 250 persons per day.⁹

The Normans Kill is a tributary of the Hudson River, and forms the boundary between the Town of Bethlehem and the City of Albany. The Normans Kill flows through the northern portion of the WRA, north along Route 144 in Glenmont, and then runs parallel to Route 32 until it crosses over Route 9W and I-87. The Normans Kill is a classified C waterway, with the best usage being fishing.

The Vloman Kill is another tributary of the Hudson River, running just south of the Henry Hudson Park before crossing over Route 144. The Town of Bethlehem Sewage Treatment Plant is located along the south side of the Vloman Kill near the mouth. The Vloman Kill flows throughout the WRA, running parallel to Clapper Road, and beneath both the Thruway and Route 9W. The Vloman Kill is a classified C, C (T) meandering stream. These waters are suitable for fish propagation and survival and the quality is suitable for primary and secondary contact recreation.

The Binnen Kill is yet another tributary of the Hudson River, flowing along the southern portion of the WRA between Shad and Schermerhorn Islands. The Binnen Kill acts as an important spawning ground for numerous types of fish including American shad, blueback herring, alewife and white perch. Scenic Hudson, an advocacy group whose goal is to protect the Hudson River and its landscape, recently purchased 123 acres of land in the Town of Bethlehem, protecting 2,000 feet of shoreline on both sides of the Binnen Kill. Eventual plans by Scenic Hudson call for the most of the land to be turned into a riverfront preserve.

⁹ Lawler, Matusky & Skelly Engineers and The Hudson Group LLC, "Swimming in the Hudson River Estuary: Feasibility Report on Potential Sites," <http://www.dec.state.ny.us/website/hudson/swimhudsonfearpt.pdf>, 2005.

2.14 NATURAL RESOURCES AND ENVIRONMENTALLY SENSITIVE RESOURCES

Natural and environmentally sensitive resources are important components in shaping a local waterfront revitalization program. This section highlights those portions of the project area that contain wetlands, steep slopes, limiting soils, and floodplains. These natural resources can be important natural amenities. In many cases, development in or around them can prove to be more expensive and limited by regulation.

Wetlands

Wetlands are among the most productive ecosystems in the world. These water-laden lowlands are a breeding ground for vegetation, fish, and wildlife. They also provide invaluable services to people in the form of water-cleaning filtration and flood control. Areas designated as wetlands may include bogs, swamps, marshes, wet meadows, flood plains, and hydric (waterlogged) soils.

Federal policy regarding wetlands is that there shall be no net loss. Although there are numerous federal and state laws that affect wetlands, the Clean Water Act (CWA) is the main regulatory tool. Section 404 of the Clean Water Act enables the Army Corps of Engineers (Corps) to grant permits for certain activities within waterways and wetlands. There are two types of Section 404 permits issued by the Corps of Engineers: individual and general permits. General permits include Nationwide Permits (NWP), which are issued when the proposed activities are minor in scope with minimal projected impacts. General permits reduce the amount of paperwork and time required to start a construction project. Finally, Section 401 of the Clean Water Act gives EPA the authority to prohibit an activity, including a construction project, if it can impact water quality or have other unacceptable environmental consequences. For most states, EPA has delegated this authority to state environmental agencies.

Under the most recent federal rules, which took effect in the fall of 2000, the U.S. Army Corps of Engineers regulates wetlands of 1/10 of an acre or more. Under the current Nationwide Permit #39, [Residential, Commercial, and Institutional Developments](#), any disturbance of wetlands and waters of the United States between 0 – 1/10 of an acre will require preconstruction notification, in which the applicant notifies the Army Corps of planned wetland disturbance, and receives written verification from the Corps prior to beginning work. If the disturbance is between 1/10 and ½ of an acre, an individual Army Corps Permit is required, along with an Individual 401 Water Quality Certification from the New York State Department of Environmental Conservation.

New York State, through the Department of Environmental Conservation generally regulates all wetlands that are 12.4 acres or more. Several clusters of wetlands are located throughout the Town, comprising roughly 570 acres. Approximately 70% of these wetlands, or 399 acres are located within the WRA. The majority of these designated wetlands found within the project area are situated within the 100-year floodplain in the southeastern portion of the Town along the Hudson River. Other wetlands are scattered throughout the WRA, straddling portions of State Route 9W, Beacon and

Asprion Roads, and Wemple Road (see Natural, Recreational, Cultural and Historical Resources Map).

Steep Slopes

Steep slopes are found throughout the Town, with the majority of such slopes found in the WRA. Attempting to build on these areas of steep slopes is not impossible, but it must be done with great care. As a result, the high costs, including environmental impacts, associated with building on steep slopes make them undesirable for development, according to the Town of Bethlehem Zoning Law. The areas are prone to erosion and instability. Currently, the Town prohibits development on any site with a slope of 20% or greater, and requires a Grading, Erosion, and Sediment Control Permit for land disturbance within 100 feet of the Town's stream banks (often steeply sloped).

Approximately 3,775 acres of the Waterfront Revitalization Area has slopes between 16% and 25%, with an additional 231 acres of the Waterfront Revitalization Area with slopes in excess of 25%. Although these steep slopes are scattered throughout the Town and the WRA, there are several areas within the WRA where slopes exceeding 25% are most common. These are found in the northeastern most part of Town, along the Normans Kill. Portions of the southeastern part of Town, between Route 144 and the Hudson River near the Bethlehem House also contain slopes greater than 25%. Other areas of steep slope exist along ravines that were carved by streams flowing into the Hudson River.

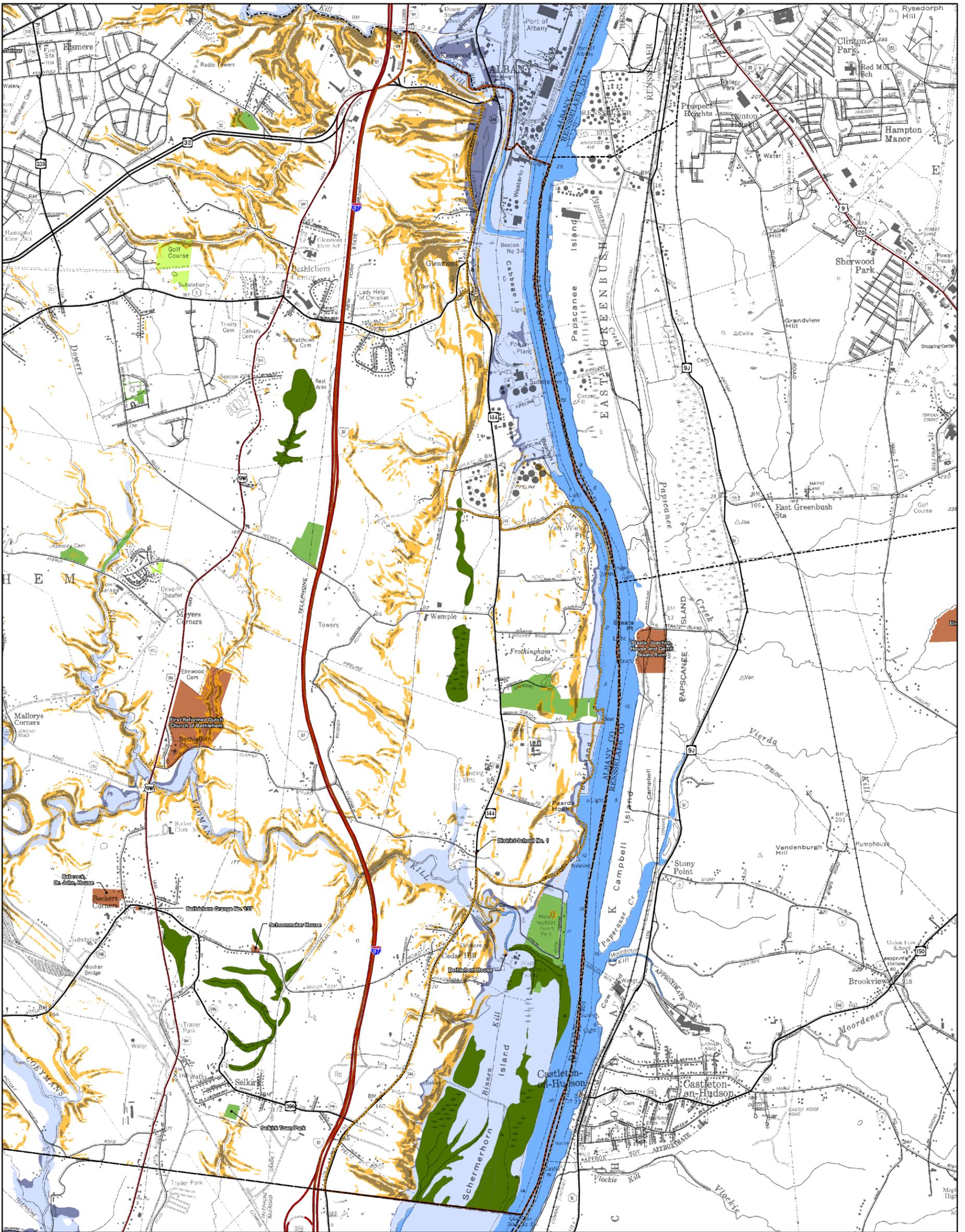
Floodplains

Most floodplains in the Town are found in low areas adjacent to rivers and creeks, and are prone to periodic flooding. In undeveloped areas, this natural interaction restores soil fertility, recharges groundwater supplies and creates unique and recognizable floodplains.

The Federal Emergency Management Agency (FEMA) has designated both 100-year and 500-year flood zones within the Town. This designation does not necessarily mean that flooding will occur only once per century, or once per five centuries. Instead, in any given year, there is a one-in-one hundred, or one-in-five-hundred chance of flooding. Flooding often occurs more or less often depending on weather conditions and upstream development changes to the river and along its banks.

According to the Town's FEMA floodplain maps, 1,602 acres within the Waterfront Revitalization Area are located within the 100-year floodplain of the Hudson River. An additional 144 acres of land are located within the adjoining 500-year floodplain. A development permit must be obtained from the Town before the start of construction or any other development within the area of special flood hazard (100-year floodplain).

***Natural, Recreational, Cultural and
Historical Resources Map***



NATURAL, RECREATIONAL, CULTURAL & HISTORICAL RESOURCES

Town of Bethlehem
Local Waterfront
Revitalization Program
June 2007

- KEY**
- TOWN BOUNDARY
 - COASTAL BOUNDARY
 - COUNTY BOUNDARY
 - WRA BOUNDARY
 - NYS DEC WETLAND
 - HUDSON RIVER
 - 16% - 25% SLOPE
 - > 25% SLOPE
 - PARK
 - WILD/CONSERVATION LAND
 - RECREATION FACILITY
 - NATIONAL HERITAGE SITE
 - 100-YEAR FLOODPLAIN
 - 500-YEAR FLOODPLAIN



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File Location: S:\GIS\06127\LWRP_WRA_NatRes_Cult_Rec.mxd

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TOWN OF BETHLEHEM

Soils

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) classified soils for agriculture and development purposes. Agricultural soils are classified as either “Prime Farmland” or “Farmland of Statewide Importance.” “Prime Farmland” is land having the best combinations of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops (*Albany County Agricultural and Farmland Protection Plan, 2004*). These soils have the growing season, soil quality, and moisture supply needed to produce sustained high yields of crops. There exists roughly 14,631 acres of such farmland, comprising 31.5% of all farmland in the Town. Comparatively speaking, the Waterfront Revitalization Area contains 4,064 acres of prime farmland, which makes up approximately 35.0% of all farmland within the Town’s WRA.

“Farmland of Statewide Importance” refers to land that is considered important for the production of crops. These soils are important to agriculture in the state, but exhibit some properties that do not meet “Prime Farmland” criteria, including seasonal wetness and erodibility. Such land produces fair to good yields when managed appropriately. Roughly 4,339 acres, or 9.3% of farmland in the Town of Bethlehem is considered “Farmland of Statewide Importance.” Likewise, 959 acres, or 8.3% of the farmland in the WRA is within this category. The Town possesses a “Right to Farm” law in order to help sustain the community’s agricultural heritage and operations; it supports sound agricultural practices necessary for the on-farm production, preparation and marketing of agricultural commodities and supports the farm protection policies set forth in § 308 of the New York State Agriculture and Markets Law. Further, these lands play an important role in defining the bucolic nature of the central and southern portions of the WRA.

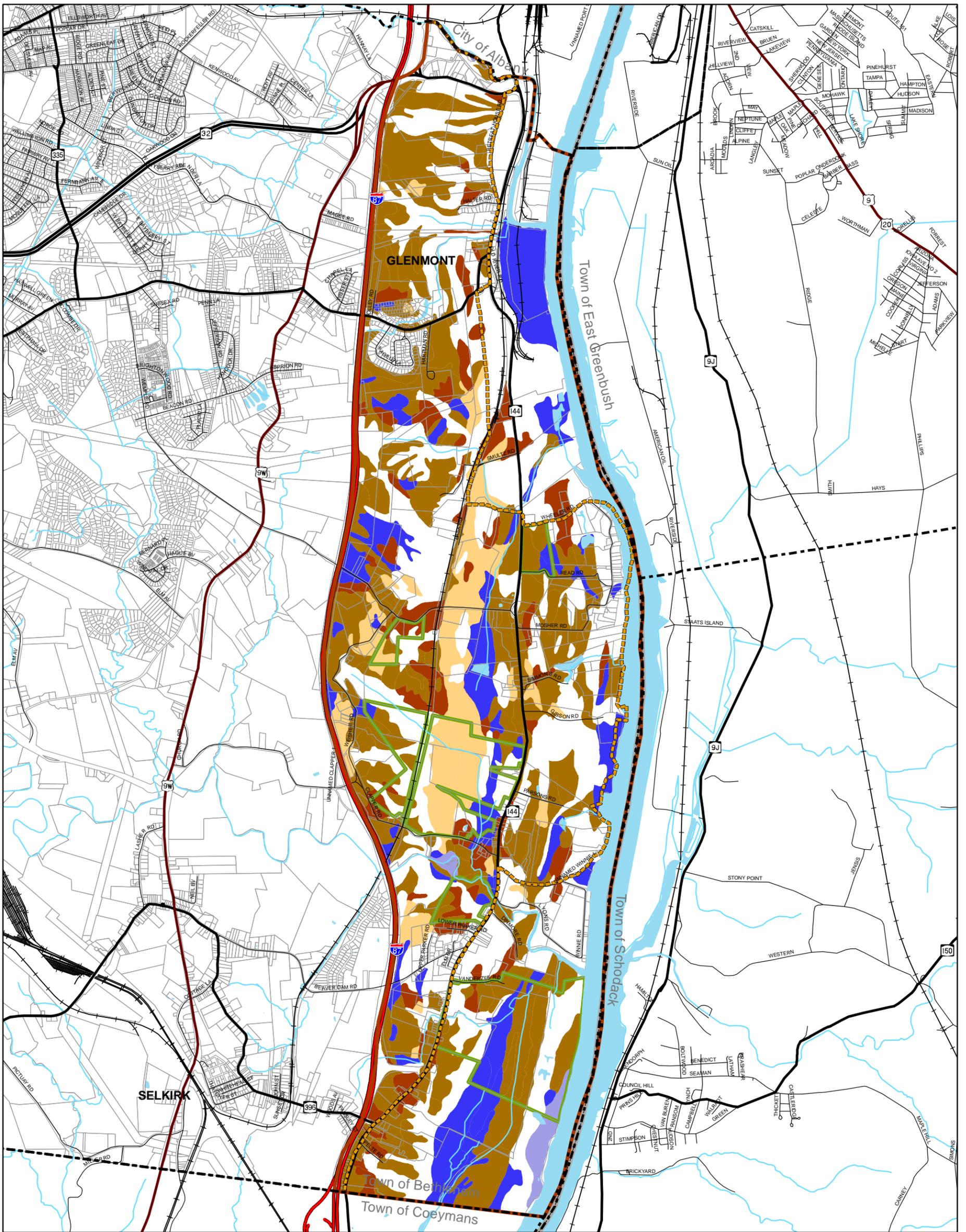
The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) also classifies soils based on their water composition. Hydric, or waterlogged soils indicate a strong presence of wetlands. More than 1/3 of all hydric soil in the Town can be found within the WRA. Approximately 9.7%, or 1,128 acres of the land in the WRA is comprised completely of hydric soil. These soils pose severe limitations to development due to their poor drainage. This severe limit is caused by high water tables, depth to the bedrock, large stones, slope, shrink-swell potential, and the ease of excavation and construction.

Soil Composition: 2006		
<i>(Source: Analysis made by Saratoga Associates)</i>		
	Waterfront Revitalization Area	Town of Bethlehem
<i>Farmland Soil Classification</i>		
Prime Farmland	35.0%	31.5%
Prime Farmland if Drained	11.9%	13.9%
Farmland of Statewide Importance	8.3%	9.3%
Not Prime Farmland	44.8%	45.3%
<i>Hydric Soil Classification</i>		
All hydric	9.7%	6.5%

Partially hydric	0.5%	1.1%
Not hydric	74.2%	72.2%
Unknown	15.6%	20.2%

The vast majority of the WRA does not have soils with suitable drainage for absorption fields. As seen in the accompanying map, the majority of the WRA has very limited septic system capabilities. This map also indicates that public sewer and water do not service these sections of the Town (see Pipeline Projects map).

Agricultural Resources Map



AGRICULTURAL RESOURCES

Local Waterfront Revitalization Program

June 2007

- KEY**
- TOWN BOUNDARY
 - COASTAL BOUNDARY
 - RIVER/STREAM
 - WATER
 - ALL HYDRIC SOILS
 - PARTIALLY HYDRIC SOILS
 - FARMLAND OF STATEWIDE IMPORTANCE
 - ALL AREAS ARE PRIME FARMLAND
 - PRIME FARMLAND IF DRAINED
 - PARCEL BOUNDARY
 - AGRICULTURAL DISTRICT
 - COUNTY BOUNDARY

0 1,000 2,000 4,000 Feet

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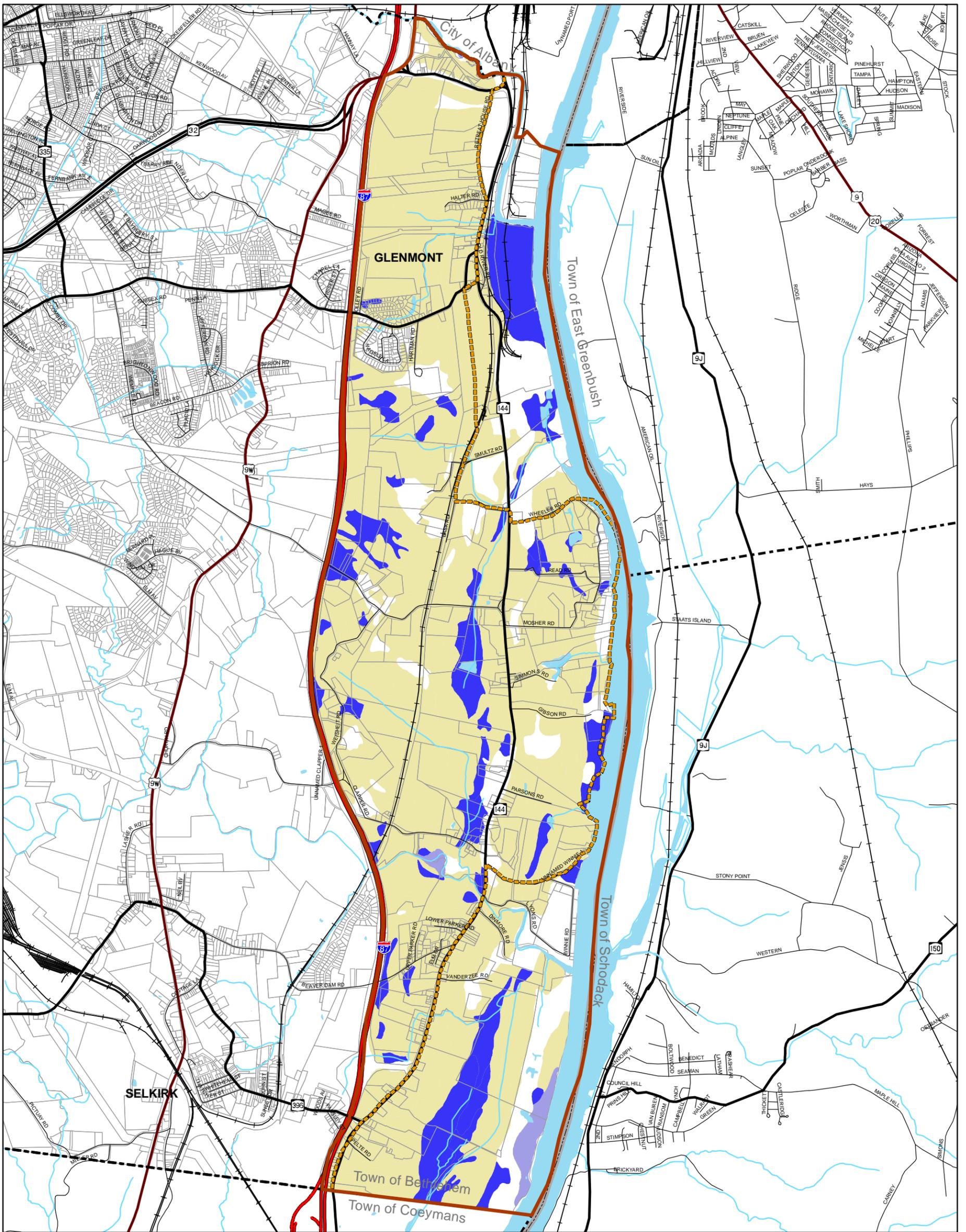
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TOWN OF BETHLEHEM



Soils Map



SOILS

Local Waterfront Revitalization Program

June 2007

KEY

- TOWN BOUNDARY
- COASTAL BOUNDARY
- RIVER/STREAM
- WRA BOUNDARY
- COUNTY BOUNDARY
- WATER
- ALL HYDRIC SOILS
- PARTIALLY HYDRIC SOILS
- VERY LIMITED SEPTIC SYSTEM CAPABILITIES
- PARCEL BOUNDARY



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File Location: S:\GIS\06127\Riverfront_LWRP_SOILS.mxd

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TOWN OF BETHLEHEM

2.15 FISH AND WILDLIFE RESOURCES

The Hudson River is unique in that it is a freshwater river that experiences tidal flows. This tidal activity creates a unique estuary habitat for a variety of aquatic creatures, and serving as a spawning and nursery ground for important fish and shellfish species. The Hudson River Estuary stretches 153 miles from Troy to New York Harbor, nearly half the river's 315 mile course between Lake Tear of the Clouds, its source in the Adirondacks, and the Battery at the tip of Manhattan. More than 200 species of fish, and numerous endangered and threatened species are found in the Hudson and its tributaries. The entire Town of Bethlehem is located within the boundaries of the Hudson River Estuary north of the "salt line," or limit of salinity, introduced by Atlantic Ocean tides. As a result, implications on ecosystems, wetlands, and natural habitats must be considered when planning for recreational uses along the waterfront.

The Hudson River estuary contains a significant acreage of tidal freshwater wetlands within the State. These wetlands contribute essential habitat that support the Hudson's biodiversity. More than 16,500 acres of River habitat, along the stretch from the Federal Dam at Troy to the southern Rockland-Westchester County line, have been designated "significant coastal fish and wildlife habitat" by the New York State Department of State. The New York Natural Heritage Program has identified numerous sites where rare plant and animal species and exemplary natural communities occur¹⁰.

According to the Natural Heritage Report on Rare Species and Ecological Communities, DEC lists several species and communities that exist within the WRA. The exact location of these species within the WRA is considered ecologically sensitive information that must be treated in a careful manner and will not be addressed in this document.

Bald Eagles are deemed threatened in both the state and the federal listing, and have been reported to be seen at, or in the vicinity of, the project site. Alewife floater, a type of bivalve mollusk, and Shortnose Sturgeon, an endangered fish, reside along a long stretch of the Hudson River within the Town of Bethlehem¹¹.

Freshwater tidal marsh is also found within the WRA. Freshwater tidal marsh communities tend to exist along more gentle sand and mud shorelines. They are close enough to coasts to experience significant tides (as noted earlier the Hudson River's tidal qualities are unique) but are far enough upriver in the estuary to be beyond the reach of oceanic salt water. Freshwater tidal marsh are rare ecological communities found only along the Hudson River from Newburgh to Troy, in the Hudson River ecozone.

¹⁰ New York State Department of Environmental Conservation, The Hudson River Estuary Program

¹¹ New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources, New York Natural Heritage Program

¹² New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources, New York Natural Heritage Program

Coastal areas such as the Bethlehem WRA are often the location of unique habitats. The New York State Department of State Division of Coastal Resources designates [Significant Coastal Fish and Wildlife Habitats](#) (SCFWH). To designate an SCFWH, the New York State Department of Environmental Conservation (DEC) evaluates the significance of coastal fish and wildlife habitat areas, and following a recommendation from the DEC, the Department of State designates and maps specific areas. Significant Fish and Wildlife Habitats in or near the Bethlehem WRA include:

- > Shad and Schermerhorn Islands
- > Papscanee Marsh and Creek
- > Schodack and Houghtaling Islands
- > Normans Kill
- > Coeymans Creek
- > Hannacroix Creek

When a proposed project is located in or near an SCFWH, an applicant may be required to address the impacts of a project on the habitat through the consistency review process, which determines whether the proposed activities would be consistent with the significant habitats policy. Narratives and maps regarding the various habitat are available from the New York State Department of State.

The New York Natural Heritage Program has also identified numerous plant species that exist within the WRA, which could potentially be adversely impacted by any new proposed development if not carefully assessed beforehand. These include Side-oats Grama, Davis' Sedge and Mock-pennyroyal, and Violet Wood-sorrel. Other plants and animals have been documented in the vicinity of the project site at one time, but have not been documented since 1979 or earlier. Although they have not been documented, it is possible that they may still exist within the project area. These include Yellow Lampmussel (a type of Bivalve Mollusk), Cobra Clubtail and Riverine Clubtail (two species of Dragonflies and Damselflies), Woodland Agrimony, Delmarva Beggar-ticks, Estuary Beggar-ticks, Green Rock-cress, Glaucous Sedge, Troublesome Sedge, Hop Sedge, American Waterwort, Large Twayblade, Cut-leaved Evening-primrose, Swamp Lousewort, Small's Knotweed, Nodding Pogonia, and Northern Bog Violet (all species of Vascular Plants).¹³

New York State Department of Environmental Conservation's Hudson River Estuary Program was formed to protect, conserve, restore and enhance the estuary. The Hudson River Estuary Action Agenda specifies goals and objectives that are intended to protect and conserve the estuary's natural resources and ecosystem health, clean up pollution and other impairments, and promote public use and enjoyment of the river. As the Estuary Program has evolved, goals and objectives have been refined every four years, with the latest to be implemented between 2005 and 2009.

¹³ New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources, New York Natural Heritage Program

Section 3

Section 3 – Local Riverfront Revitalization Program Policies

DEVELOPED WATERFRONT POLICIES

- Policy 1 Foster a pattern of development in the waterfront area that enhances community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a waterfront location, and minimizes adverse effects of development.
- Policy 2 Preserve historic resources of the waterfront area.
- Policy 3 Enhance visual quality and protect scenic resources the waterfront area.

NATURAL WATERFRONT POLICIES

- Policy 4 Minimize loss of life, structures, and natural resources from flooding and erosion.
- Policy 5 Protect and improve water quality and supply in the waterfront area.
- Policy 6 Protect and restore the quality and function of the waterfront area ecosystem.
- Policy 7 Protect and improve air quality in the waterfront area.
- Policy 8 Minimize environmental degradation in the waterfront area from solid waste and hazardous substances and wastes.

PUBLIC WATERFRONT POLICIES

- Policy 9 Provide for public access to, and recreational use of, waterfront waters, public lands, and public resources of the waterfront area.

WORKING WATERFRONT POLICIES

- Policy 10 Protect water-dependent uses and promote siting of new water-dependent uses in suitable locations.
- Policy 11 Promote sustainable use of living marine resources in the waterfront area.
- Policy 12 Protect agricultural lands in the waterfront area.
- Policy 13 Promote appropriate use and development of energy and mineral resources.

DEVELOPED WATERFRONT POLICIES

Policy 1 **Foster a pattern of development in the coastal area that enhances community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a coastal location, and minimizes adverse effects of development.**

To foster orderly patterns of growth and to protect Bethlehem's scenic, historic and ecological riverfront areas, development should be located in areas that have already been developed and have existing infrastructure. When undertaking any construction within the Riverfront Revitalization Area, consideration should be given to how the project will benefit both the residents and the region as a whole.

New commercial, office, industrial and residential uses will occur in the North Riverfront District. The Central Riverfront District will be an important transition area and will include a range of development opportunities that must be held to high quality design guidelines that clearly reflect the unique sense of place of the Central Riverfront District. The South Riverfront District is a unique place that provides an important expression of the rich history in both the Town and the region as well as the ecological value of the riverfront; the district is recognized for its long-term green space and cultural and heritage interpretation opportunities; any new development here will support recreational facilities, historic preservation, cultural interpretation, natural resource preservation, the preservation of vistas and views, and other activities which enhance the natural, bucolic nature of this area.

The following guidelines will be used in evaluating development or redevelopment actions in the Town of Bethlehem:

1. Along the shoreline of the Town, priority should be given to uses which are compatible with the historic and scenic character of the area and which are dependent on a location adjacent to the water;
2. The action should enhance existing and anticipated uses;
3. Public action should, whenever possible, serve as a catalyst to the long-term goal outlined in the LWPR for private investment in the area;
4. The action should improve the deteriorated condition of a site and, at a minimum, shall not cause further deterioration;
5. The action must lead to development which is compatible with the character of the area, with consideration given to open space, scale, architectural style, density, and intensity of use;
6. The action should have the potential to improve the existing economic base of the community and, at a minimum, must not jeopardize this base;
7. The action should improve adjacent and upland views of the water and shoreline, and, at a minimum, must not affect these views in an insensitive manner; and

8. The action should have the potential, or improve the potential for, multiple uses of the site (particularly recreational uses).

1.1 Concentrate development and redevelopment in order to revitalize deteriorated and underutilized area and strengthen the traditional riverfront focus of Bethlehem.

New development should be located where infrastructure is adequate or can be upgraded to accommodate new development. For the purposes of this plan, the WRA has been divided into three districts, each with different development patterns. Further discussion of each district appears in Section 4.

- ▶ North Riverfront District: From the City of Albany border at the north to Wheeler Road on the south, encompassing Corning Hill, North Harbor, South Harbor, and Sub-Port
- ▶ Central Riverfront District: From Wheeler Road at the north to Clapper Road at the south, encompassing the Taconic Viewshed, Van Wies, Riverfront Core, and Lyon
- ▶ South Riverfront District: From Clapper Road at the north, to the southern border of the WRA, encompassing the Flats

The North Riverfront has the most extensive infrastructure, but is also limited in the short-term because of potential environmental contamination issues; as opportunities develop and environmentally challenged properties are reclaimed, the character of the area will integrate the working riverfront with new mixed-use redevelopment. Any development within the Central Riverfront District will provide for environmentally sensitive development meeting high standards for environmentally-responsible, sustainable, development, and provide long-term green space and cultural and heritage interpretation opportunities.

As recommended in the Comprehensive Plan, new development west of Route 144 will be in the Hamlet form. Hamlets function as the community's centers of social, cultural, civic and economic activity. As a result, the hamlets should be the preferred location for all community facilities (libraries, post offices, community centers, town offices, etc.) and civic functions. Hamlets are enabled by zoning that allows a full range of mixed residential, commercial retail, office, and entertainment uses; and design guidelines and standards.¹

The following planning principles should be used to guide investment and preparation of development strategies and plans:

- ▶ Scale development to be appropriate to the setting.
- ▶ Design development to highlight existing resources, such as local history and important natural

and man-made features to reinforce community identity.

- ▶ Design the riverfront as a focus for activity that draws people to the coast and site design links the riverfront to upland portions of the Town.
- ▶ Meet community and regional needs and market demands in making development choices.
- ▶ Recognize environmental constraints as limiting development.
- ▶ Restore environmental quality to degraded areas.

All development or uses should recognize the unique qualities of a coastal location by:

- ▶ Using building and site design to make beneficial use of a coastal location and associated coastal resources.
- ▶ Minimizing consumption of riverfront lands and potential adverse impacts on natural resources
- ▶ Limiting shoreline alteration and surface water coverage.
- ▶ Incorporating recreational activities, public access, open space, or amenities, as appropriate to the use, to enhance the site and the surrounding community, and to increase visual and physical access to the coast.
- ▶ Attracting people to the Riverfront, as appropriate to the use.
- ▶ Ensuring that design and siting of uses and structures complements the surrounding community and landscape.
- ▶ Use indigenous plants as components of landscape design to improve habitat and water quality, and to lessen water demand.
- ▶ Reinforcing community identity by highlighting local history and important natural and man-made features.

1.2 Ensure that development or uses make beneficial use of their riverfront location.

The amount of riverfront and its associated resources are limited. All uses should relate to the unique qualities associated with a riverfront location. Consideration should be given to whether a use is appropriate for a riverfront location. When planning riverfront development or redevelopment, the riverfront location should be reflected in the siting, design, and orientation of the development.

Water-dependent uses

Water-dependent uses should be promoted where appropriate and given precedent over other types of development at suitable riverfront sites. Existing water dependent uses should be protected when consistent with this Local Waterfront Revitalization Program.

Water-dependent uses are activities which require a location in, on, over, or adjacent to the water because the activities require direct access to water and the use of water is an integral part of the activity.

¹Town of Bethlehem Comprehensive Plan, adopted August 2005, p. 4.3.

Development which is not dependent on a riverfront location, or that cannot not make beneficial use of a riverfront location, should be avoided.

Water-enhanced uses

Water-enhanced uses may be encouraged where they are compatible with surrounding development and are designed to make beneficial use of their riverfront location.

Water enhanced uses are activities that do not require a location on or adjacent to the water to function, but whose location on the riverfront could add to public enjoyment and use of the water's edge, if properly designed and sited. Water-enhanced uses are generally of a recreational, cultural, commercial, or retail nature.

To ensure that water-enhanced uses make beneficial use of their riverfront location, they should be sited and designed to:

- ▶ Attract people to or near the riverfront and provide opportunities for access that is oriented to the river.
- ▶ Provide public views to or from the water.
- ▶ Minimize consumption of riverfront land.
- ▶ Not interfere with the operation of water-dependent uses.
- ▶ Not cause significant adverse impacts to community character and surrounding land and water resources.

Uses should be avoided which would:

- ▶ result in unnecessary and avoidable loss of coastal resources;
- ▶ ignore their coastal setting as indicated by design or orientation, and
- ▶ do not, by their nature, derive economic benefit from a riverfront location

1.3. Maintain and enhance natural areas, recreation, open space, and agricultural lands.

Natural areas, open space, and recreational land produce public benefits that may not be immediately tangible. In addition to scenic and recreational benefits, these lands provide watershed management of flood control benefits, serve to recharge ground water, and maintain links to a region's agricultural heritage.

To enhance community character and maintain the quality of the natural and man-made environments, potential adverse impacts on existing development, physical environments, and economic factors should be addressed and mitigated. Development requirements should reflect site characteristics, limit the disturbance of land and water, and foster visual compatibility of the development with surrounding areas.

Adverse impacts on natural resources should be avoided, including:

- ▶ deterioration of water quality;
- ▶ loss, fragmentation, and impairment of habitats and wetlands; and
- ▶ alterations to natural protective features and changes to the natural processes of erosion and accretion that lead to increased erosion rates, damage by coastal storms, and tidal flooding.

Special consideration should be given to protecting stands of large trees, unique forest cover types and habitats, and old fields. The open space value of agricultural land should be protected or integrated into development proposals.

The expansion of infrastructure into undeveloped areas should be avoided where such expansion would promote growth and development detrimental to natural resources and agricultural productivity. As a way to protect the natural areas of the riverfront, infrastructure investments should be made in the North Riverfront District to foster redevelopment of underutilized sites.

1.4 Minimize potential adverse land use, environmental, and economic impacts that would result from proposed development

To enhance community character and maintain the quality of the natural and man-made environments of the riverfront area, potential adverse impacts on existing development, physical environments, and economic factors should be addressed and mitigated. Development requirements should reflect existing site characteristics, limit the disturbance of land and water, and foster visual compatibility of development with surrounding areas.

Cumulative and secondary adverse impacts from development and redevelopment should be minimized. Cumulative impacts are the result of the incremental or increased impact of repetitive actions or activities when added to other past, present, or future actions or activities. Secondary impacts are those which are foreseeable, but occur at a later time or at a greater distance from the action, and are caused by an action or activity, whether directly or indirectly.

1.5 Protect stable residential areas

New development located in or adjacent to existing residential areas should be compatible with neighborhood character. In places where conflicts or potential conflicts already exist, buffers should be developed that enhance the buffer. The Van Wies district, located in the Central Riverfront District between Wheeler Road and Wemple Road, is defined by its stable, low intensity, peaceful residences with distinct views of the Hudson River. The district has played a major role in the Town's history, and future redevelopment at either end of this district should include the appropriate buffers to maintain this neighborhood as one of Bethlehem's most unique and well-established neighborhoods. Trail connections should also be sought to connect the neighborhood with

redevelopment of the Town-owned property along Simmons Road.

New uses in a stable residential area should be avoided when the use, its size and scale will significantly impair neighborhood character. New construction, redevelopment, and screening, such as fences and landscaping, should not reduce or eliminate vistas that connect people to the water and the land.

Policy2 Preserve historic resources of the waterfront area

Archaeological sites and historic structures are tangible links to the past development of a community—both its cultural and economic life—providing a connection to past generations and events. Both the Central and South Riverfront Districts express the rich history in the Town and the region as well as the ecological value of the riverfront. These resources will be protected and enhanced whenever practically possible.

2.1 Maximize preservation and retention of historic resources

These standards are derived from and explain the U.S. Secretary of the Interior's Standards for Identification, Restoration, and Rehabilitation of historic resources. Consult the Secretary of the Interior's standards for additional detail on specific aspects of historic preservation.

A. Historic resources are those structures, landscapes, districts, areas or sites, or underwater structures or artifacts which are listed or designated as follows:

1. any historic resource in a federal or state park established, solely or in part, in order to protect and preserve the resource;
2. any resource on, nominated to be on, or determined eligible to be on the National or State Register of Historic Places;
3. any cultural resource managed by the New York State Nature and Historic Preserve Trust or the New York State Natural Heritage Trust;
4. any archaeological resource which is on the inventories of archaeological sites maintained by the New York State Department of Education or the Office of Parks, Recreation, and Historic Preservation;
5. any resource which is a significant component of an Urban Cultural Park; and
6. any locally designated historic or archaeological resources protected by a local law or ordinance

B. Identify those elements important in defining the character and value of a historic resource.

This section presents standards to assist in defining the specific elements that make up the historic character of the resource, once a resource has been identified as being historic.

1. Use designation information, available documentation, and original research to identify

important character-defining elements of the historic resource in terms of its:

- a. time, place, and use
 - b. materials, features, spaces, and spatial relationships
 - c. setting within its physical surroundings and the community
 - d. association with historic events, people, or groups
2. Determine the value of the historic resource as indicated by:
 - a. its membership within a group of related resources which would be adversely impacted by the loss of any one of the group of resources
 - b. the rarity of the resource in terms of the quality of its historic elements or in the significance of it as an example, or
 - c. the significance of events, people, or groups associated with the resource

C. Preserve and retain the historic character-defining elements of the resource. Use the following standards to achieve the least degree of intervention.

These standards should be applied as much as possible to achieve complete preservation and retention of the resource. Passive approaches are often insufficient to achieve needed preservation; an active commitment to preservation is necessary.

1. Protect and maintain historic materials and features according to the following approach:
 - a. Evaluate the physical condition of important materials and features.
 - b. Stabilize materials and features to prevent further deterioration.
 - c. Protect important materials and features from inadvertent or deliberate removal or damage.
2. Ensure the protection of historic elements through a program of nonintrusive maintenance of important materials and features.
3. Repair historic materials and features according to recognized preservation methods when their physical condition warrants.
4. When a historic feature is missing or the level of deterioration or damage precludes maintenance or repair:
 - a. Limit the replacement of extensively deteriorated features or missing parts to the minimum degree necessary to maintain the historic character of the resource.
 - b. Maintain historic character where a deteriorated or damaged feature is replaced in its entirety. In replacing features, the historic character of the resource can be best maintained by replacing parts with the same kind of material. Substitute materials may be suitable if replacement in kind is not technically or economically feasible and the form, design, and material convey the visual appearance of the remaining parts of the feature.
 - c. When re-establishing a missing feature, ensure that the new feature is consistent with the historic elements of the resource. If adequate historical, pictorial, and physical documentation exists so that the feature may be accurately reproduced, use available documentation to design and construct a new feature. If adequate

documentation does not exist, design and construct a new feature that is compatible with the remaining features of the resource. The new design should be based on research, pictorial, and other evidence so that a true historical appearance is created.

D. Provide for efficient, compatible use of the historic resource.

A valid approach to preserving historic resources is to provide for on-going, compatible use of that resource.

1. Foster uses that maximize retention of the historic character of the resource:
 - a. Maximum retention of historic character is best achieved by using the resource as it was historically used.
 - b. If the resource cannot be used as it was historically used, adapt a use to the historic resource that maximizes retention of character-defining materials and features.
2. Minimize alterations to the resource to preserve and retain its historic character.
 - a. Minimize potential negative impacts on the resource's historic character due to necessary updates in systems to meet health and safety code requirements or to conserve energy.
 - b. Make alterations to the resource only as needed to ensure its continued use and provided that adverse impact on the resource is minimized. Alterations should not obscure, destroy, or radically change character-defining spaces, materials, features, or finishes in order to minimize adverse impact on the resource. Alterations may include selective removal of features that are not historic elements of the resource and its setting and that detract from the overall historic character of the resource.
 - c. Construct new additions only after it is determined that an exterior addition is the only viable means of assuring continued use of the resource.
 - d. In constructing new additions, use appropriate design and construction to minimize adverse impact on the resource's historic character. Adverse impact can be minimized in new additions by: clearly differentiating from historic materials and features; using design compatible with the historic materials, forms and details, size, scale and proportion, and massing of the resource to protect the integrity of the resource and its setting. In addition, new additions should be designed such that, if removed in the future, the essential form and integrity of the historic resource and its setting would not be impaired.

E. Minimize loss of historic resources or the historic character of the resources of the Coastal Area when it is not possible to completely preserve and retain the resource.

1. Relocate an historic resource when it cannot be preserved in place and:
 - a. the resource is imperiled:
 - (1) directly by a proposed activity which has no viable alternative which would

- not result in adverse effects on the resource, or
- (2) indirectly by surrounding conditions which are likely to result in degradation or inadequate maintenance of the resource
- b. the resource cannot be adapted for use on the existing site which would result in preservation of the resource
- c. a suitable site for relocation is available, and
- d. it is technically and economically feasible to move the resource
- 2. Allow for demolition of the resource only when:
 - (1) it is not feasible to protect the resource through relocation, and
 - (2) the resource has been officially certified as being imminently dangerous to life or public health, or
 - (3) the resource cannot be adapted for any use on the existing site or on any new site
- 3. Document in detail the character-defining elements of the historic resource in its original context prior to relocation or demolition of the resource.

F. Avoid potential adverse impacts of development on adjacent or nearby historic resources.

- 1. Protect historic resources by ensuring that development is compatible with the historic character of the affected resource.
- 2. Design development to a size, scale, proportion, mass, and with a spatial relationship compatible with the historic resource.
- 3. Design development using materials, features, forms, details, textures, and colors compatible with similar features of the historic resource.

G. Limit adverse cumulative impacts on historic resources.

- 1. Minimize the potential adverse cumulative impact on a historic resource which is a member of a group of related resources that may be adversely impacted by the loss or diminution of any one of the members of the group.
- 2. Minimize the potential cumulative impacts of a series of otherwise minor interventions on a historic resource.
- 3. Minimize potential cumulative impacts from development adjacent to the historic resource.

2.2 Protect and preserve archaeological resources.

A. Conduct a cultural resource investigation when an action is proposed on an archaeological site, fossil bed, or in an area identified for potential archaeological sensitivity on the archaeological resources inventory maps prepared by the New York State Office of Parks, Recreation and Historic Preservation.

- 1. Conduct a site survey to determine the presence or absence of cultural resources in the

project's potential impact area.

2. If cultural resources are discovered as a result of the initial survey, conduct a detailed evaluation of the cultural resource to provide adequate data to allow a determination of the resource's archaeological significance.

B. If impacts are anticipated on a significant archaeological resource, minimize potential adverse impacts by:

1. redesigning the project
2. reducing direct impacts on the resource, and
3. recovering data prior to construction

C. Avoid disturbance or adverse effects on any object of archaeological or paleontological interest situated on or under lands owned by the State of New York. These resources may not be appropriated for private use.

2.3 Protect and enhance resources that are significant to the coastal culture.

A. Protect historic shipwrecks and shipwrecks to which the state holds title.

Numerous colonial era to modern-day shipwrecks lie in coastal waters. While the location of many of these ships is well documented, more research remains to be done to identify and protect these historic and recreational resources as significant components of the coastal culture of the state. Historic shipwrecks are those wrecks which, by reason of their antiquity or their historic, architectural, archaeological, or cultural value, have state or national importance and are eligible for inclusion on the State or National Register of Historic Places. The state holds title to all shipwrecks determined to be abandoned under the Abandoned Shipwrecks Act of 1987.

1. Provide for the long-term protection of historic shipwrecks through the least degree of intervention. The least degree of intervention can be achieved by preserving historic shipwrecks in place. When preservation is not feasible, record and recover shipwrecks or their artifacts.
2. Manage shipwrecks to provide for public appreciation, use, and benefit.
The nature of public use and benefits associated with shipwrecks is very diverse. Sport divers should have reasonable access to explore shipwrecks. Additional public appreciation and enjoyment of shipwrecks can be achieved through interpretive access which describes the history and value of the resource. Archaeological research on historic shipwrecks is particularly important where research can be reasonably expected to yield information important to understanding the past.
3. Avoid disturbance to shipwrecks unless the shipwreck: poses a navigation hazard; or, would impede efforts to restore natural resource values.
4. Prevent unauthorized collection of shipwreck artifacts and associated direct or cumulative

impacts.

5. Maintain the natural resource values that are associated with shipwreck sites which may be sensitive to disturbance.

A. Preserve and enhance historic lighthouses and other navigational structures.

Historic lighthouses and other navigation aids are significant to the coastal culture of the state.

1. Provide for the long-term protection of historic lighthouses and navigation aids listed or eligible to be listed in the National or State Register of Historic Places through the least degree of intervention.
2. Protect historic lighthouses from erosion hazards.
 - a. Use nonstructural methods such as beach nourishment as the first choice in providing protection from erosion hazards
 - b. Relocate historic lighthouses which are imperiled by erosion hazards that cannot be managed by nonstructural methods. Imperiled lighthouses should be relocated to adjacent sites whenever feasible, as determined by economics and engineering constraints. In relocating a lighthouse, particular attention should be given to preserving the original context and function of the lighthouse. In addition, any decision to relocate a lighthouse should provide for a sufficient period of protection to warrant the expenditure of funds for relocation.
 - c. Use hard structural erosion control measures to preserve historic lighthouses only if:
 - (1) the lighthouse is clearly imperiled by erosion hazards
 - (2) relocation is not feasible based on economic or engineering constraints
 - (3) nonstructural approaches would not provide sufficient protection, and
 - (4) hard structures would not adversely affect coastal processes.

B. Protect the character of historic maritime communities.

Historic maritime communities are significant to the coastal culture of the state.

1. Preserve traditional uses which define the maritime character of the area.
2. Preserve maritime character by maintaining appropriate scales, intensity of use, and architectural style.
3. Provide interpretive materials in appropriate settings to augment the public's understanding and appreciation of the state's maritime heritage.

Policy 3 Enhance visual quality and protect scenic resources in the waterfront area

The future character of the riverfront as a whole will reflect the riverfront's unique identity of today. Bethlehem's Waterfront Revitalization Area includes one of the nation's most unique settings: it encompasses the only stretch of the National Heritage estuary without railroad or commercial development on either side and akin to the what Henry Hudson and his crew members likely saw when they arrived in 1609. The areas in the South Riverfront District visible from the water will be maintained and preserved in essentially its present visual context, maintaining the natural shoreline to protect views. The Town's existing land use regulations support this policy.

The following measures will be considered when evaluating projects within the coastal:

1. Maintain or restore original landforms except where altered landforms provide useful screening or contribute to scenic quality.
2. Avoid structures or activities which introduce visual interruptions to natural landscapes including:
 - a. introduction of intrusive artificial light sources
 - b. fragmentation of and structural intrusion into open space areas
 - c. changes to the continuity and configuration of natural shorelines and associated vegetation

NATURAL WATERFRONT POLICIES

Policy 4 Minimize loss of life, structures, and natural resources from flooding and erosion.

The erosion aspects of this policy are not applicable, since there are no identified Coastal Erosion Hazard Areas (as it pertains to Article 34, of the Environmental Conservation Law, Coastal Erosion Hazard Areas) within the Bethlehem Waterfront Revitalization Area.

The Town participates in the National Flood Insurance Program. The flood hazard areas for 100-year floods in the Town of Bethlehem, as defined in the Flood Insurance Rate Maps (FIRM) prepared by the Federal Emergency Management Agency.

Erosion control structures often contribute to erosion both on and off the site due to poor design and siting and lack of downdrift remediation. Increased erosion, aesthetic impairments, loss of public recreational resources, loss of habitats, and water quality degradation can result from individual hardening of the shoreline. The cumulative impact of these structures is potentially large. Before a permit is granted to allow construction of hard erosion control structures, the purpose, function, impact, and alternatives to the project need to be carefully evaluated to determine that the structures are necessary and to avoid adverse impacts.

Although some sections of Bethlehem's shoreline have been heavily fortified, particularly in the North Riverfront District, significant stretches remain in a natural state. The natural shoreline has an inherent natural, social, and economic value that should be respected to ensure continuing benefits to the state. Consequently, those portions of the shoreline that are not fortified should generally remain in a natural condition to respond to coastal processes. Where feasible and appropriate, portions of the shoreline that have been hardened should be returned to a natural condition. Sound stabilization systems have been required at Henry Hudson Park to combat wave action and winter ice. However, the plan for Henry Hudson Park includes a combination of restored shoreline stabilization and a return to a natural shoreline for a segment.

Development and redevelopment in hazard areas needs to be managed to reduce exposure to coastal hazards. Hardening of the shoreline is to be avoided except when alternative means, such as soft engineering alternatives, revegetation, or inlet sand bypassing, are impractical to protect principal structures or extensive public investment (land, infrastructure, facilities). Areas of extensive public investment is found in developed centers.

Barrier landforms that protect significant public investment or natural resources should be maintained. Soft structural protection methods are to be used to conform with the natural coastal processes. Barrier beach landforms should be maintained by using clean, compatible dredge material, when feasible, for marsh creation projects.

In suitable locations and where appropriate, interpretive materials could be considered to enhance the public's understanding of natural coastal processes.

This policy seeks to protect life, structures, and natural resources from flooding and erosion hazards throughout the Coastal Area. The policy reflects state flooding and erosion regulations and provides measures for reduction of hazards and protection of resources.

4.1 Minimize losses of human life and structures from flooding and erosion hazards by using the following management measures which are presented in order of priority:

A. Minimize potential loss and damage by locating development and structures away from flooding and erosion hazards.

1. Avoid developing new structures and uses or reconstruction of structures damaged by 50 percent or more of their value in areas which are likely to be exposed to hazards unless:
 - a. the structure or use functionally requires a location on the coast or in coastal waters, or
 - b. the new development would be located in an area of substantial public investment, or
 - c. the new structure or use is necessary for shoreline development which:
 - (1) reinforces the role of Maritime Centers and Areas for Concentrated Development in concentrating water-dependent uses and other development, and would not result in impairment of natural resources
2. Locate new structures which are not functionally dependent on a location on or in coastal waters, are not in areas of substantial public investment, or do not reinforce the role of a developed working waterfront, as far away from flooding and erosion hazards as possible.
 - a. No development is permitted in natural protective feature areas (nearshore, beaches, bluffs, primary dunes, and wetlands as defined under 6 NYCRR Part 505), except as specifically allowed under the relevant portions of 6 NYCRR 505.8.
 - b. Locate new development away from coastal hazards associated with inlet areas.
 - c. Avoid hazards by siting structures to maximize the distance from Coastal Erosion Hazard Areas.
3. Where practical, moving existing structures and development which are exposed to hazards away from the hazard is preferred over maintaining structures and development in place. Maintaining existing development and structures in hazard areas may be warranted for:
 - a. structures which functionally require a location on the coast or in coastal waters, or
 - b. water-dependent uses which, by the nature of the use, cannot avoid exposure to hazards, or
 - c. sites in areas with extensive public investment, public infrastructure, or major public facilities
4. Provide public infrastructure in or near identified high velocity flood zones, structural hazard areas, or natural protective features only if the infrastructure:
 - a. will not promote new development or expansion of existing development in: a Coastal Barrier Resource Area, except as provided in the Coastal Barrier Resource System Act; a Coastal Erosion Hazard Area; or a V-zone.

- b. is designed in a manner which will not impair protective capacities of natural protective features, and
 - c. is designed to avoid or withstand damage from flooding and erosion
- B. Use vegetative non-structural measures which have a reasonable probability of managing flooding and erosion based on shoreline characteristics including exposure, geometry, and sediment composition. Use vegetative measures to increase protective capacities of natural protective features at every opportunity.**
- C. Enhance existing natural protective features and use non-structural measures which have a reasonable probability of managing erosion.**
 - 1. Increase protective capacity of natural protective features using practical vegetative measures in association with all other enhancement efforts.
- D. Use hard structural erosion protection measures for control of erosion only where:**
 - 1. Avoidance of the hazard is not appropriate because a structure is: functionally dependent on a location on or in coastal waters; located in an area of extensive public investment; or reinforces the role of Maritime Centers or Areas for Concentrated Development.
 - 2. Vegetative approaches to controlling erosion are not effective.
 - 3. Enhancement of natural protective features would not prove practical in providing erosion protection.
 - 4. Construction of a hard structure is the only practical design consideration and is essential to protecting the principal use.
 - 5. The proposed hard structural erosion protection measures are:
 - a. limited to the minimum scale necessary
 - b. based on sound engineering practices
 - 6. Practical vegetative methods have been included in the project design and implementation.
 - 7. Adequate mitigation is provided and maintained to ensure that there is no adverse impact to adjacent property or to natural coastal processes and natural resources and, if undertaken by a private property owner, does not incur significant direct or indirect public costs.

4.2 Preserve and restore natural protective features.

A. Maximize the protective capabilities of natural protective features by:

- 1. avoiding alteration or interference with shorelines in a natural condition
- 2. enhancing existing natural protective features
- 3. restoring the condition of impaired natural protective features wherever practical
- 4. using practical vegetative approaches to stabilize natural shoreline features
- 5. managing activities to limit damage to, or reverse damage which has diminished, the protective capacities of the natural shoreline

6. providing relevant signage or other educational or interpretive material to increase public awareness of the importance of natural protective features

B. Minimize interference with natural coastal processes.

1. Provide for natural supply and movement of unconsolidated materials and for water and wind transport.
2. Limit intrusion of structures into coastal waters.
3. Limited interference with coastal processes may be allowed where the principal purpose of the structure is necessary to:
 - a. simulate natural processes where existing structures have altered the coast, or
 - b. provide necessary public benefits for flooding and erosion protection, or
 - c. provide for the efficient operation of water-dependent uses
4. Limited interference is to be mitigated to ensure that there is no adverse impact to adjacent property, to natural coastal processes and natural resources, and, if undertaken by a private property owner, does not incur significant direct or indirect public costs.

4.3 Protect public lands and public trust lands and use of these lands when undertaking all erosion or flood control projects.

A. Retain ownership of public trust lands which have become upland areas due to fill or accretion resulting from erosion control projects.

B. Avoid losses or likely losses of public trust lands or use of these lands, including public access along the shore, which can be reasonably attributed to or anticipated to result from erosion protection structures.

C. Provide and maintain compensatory mitigation of unavoidable impacts to ensure that there is no adverse impact to adjacent property, to natural coastal processes and natural resources, or to public trust lands and their use.

4.4 Manage navigation infrastructure to limit adverse impacts on coastal processes.

A. Manage navigation channels to limit adverse impacts on coastal processes.

1. Design channel construction and maintenance to protect and enhance natural protective features and prevent destabilization of adjacent areas by:
 - a. using dredging setbacks from established channel edges and designing finished slopes to ensure their stability
 - b. locating channels away from erodible features, where feasible
 - c. preventing adverse alteration of basin hydrology
 - d. including by-passing methods to maintain navigability and reduce frequency of dredging

2. Use clean dredged material as beach nourishment whenever the grain size of the dredged material is the same size or slightly larger than the grain size of the potential recipient beach.

B. Manage stabilized inlets to limit adverse impacts on coastal processes.

1. Include sand bypassing at all engineered or stabilized inlets which interrupt littoral processes.
2. Manage flood and ebb tidal deltas to simulate natural processes.
3. Avoid extending jetties when it will increase disruption of coastal processes.

4.5 Expend public funds for management or control of flooding or erosion hazards only in areas of the coast which will result in proportionate public benefit.

Give priority in expenditure of public funds to actions which protect public health and safety, mitigate past flooding and erosion, protect areas of intensive development, and protect substantial public investment (land, infrastructure, facilities).

A. Expenditure of public funds for flooding or erosion control projects:

1. is limited to those circumstances where public benefits exceed public costs;
2. is prohibited for the exclusive purpose of flooding or erosion protection for private development, with the exception of work done by an erosion control district, and
3. may be apportioned among each level of participating governmental authority according to the relative public benefit accrued

B. Factors to be used in determining public benefit attributable to the proposed flood or erosion control measure include:

1. economic benefits derived from protection of public infrastructure and investment and protection of water-dependent commerce, or
2. protection of significant natural resources and maintenance or restoration of coastal processes, or
3. integrity of natural protective features, or
4. extent of public infrastructure investment, or
5. extent of existing or potential public use.

Application of these factors indicate that public expenditure for erosion and flood control projects may be warranted in developed centers.

4.6 Comply with the provisions of any municipal erosion management plan, consistent with the

provisions of this policy.

- 4.7 Include sea level rise calculations in siting and design of all major projects having more than a fifty year design life.**

Policy 5 Protect and improve water quality and supply in the waterfront area.

The purpose of this policy is to protect the quality and quantity of water in the Coastal Area. Quality considerations include both point and nonpoint pollution management.

Water quality protection and improvement must be accomplished by the combination of managing new and remediating existing sources of pollution. In some areas with existing water quality impairments, aggressive remediation measures may be needed.

5.1 Prohibit direct or indirect discharges which would cause or contribute to contravention of water quality standards and targets.

Prevent point source discharges into coastal waters and manage or avoid land and water uses which would:

1. exceed applicable effluent limitations, or
2. cause or contribute to contravention of water quality classification and use standards, or
3. materially adversely affect receiving water quality, or
4. violate a vessel no-discharge zone

Ensure effective treatment of sanitary sewage and industrial discharges by:

1. maintaining efficient operation of sewage and industrial treatment facilities;
2. providing, at a minimum, effective secondary treatment of sanitary sewage;
3. modifying existing sewage treatment facilities to provide improved nitrogen removal capacity;
4. incorporating treatment beyond secondary, as feasible, particularly focusing on nitrogen removal, as part of new wastewater treatment plant design;
5. reducing demand on treatment facilities:
 - a. reduce infiltration of excess water in collection and transport systems
 - b. eliminate unauthorized collection system hookups
 - c. pretreat industrial wastes
 - d. limit discharge volumes and pollutant loadings to or below authorized levels
 - e. install low-flow water conservation fixtures in:

- (1) all new development, and
- (2) when replacing fixtures in existing development
- 6. reducing the loadings of toxic materials into coastal waters by including limits on toxic metals as part of wastewater treatment plant (WWTP) effluent permits
- 7. reducing or eliminating combined sewer overflows
- 8. providing and managing on-site disposal systems:
 - a. Use on-site disposal systems only when impractical to connect with public sewer systems.
 - b. Protect surface and groundwater against contamination from pathogens and excessive nutrient loading by keeping septic effluent separated from groundwater and by providing adequate treatment of septic effluent.
 - c. This standard addresses performance of septic systems. Factors to include in assessing septic systems include water table elevation, soil porosity, and system design. Septic system capacity is an important factor which can be controlled by reducing unnecessary organic loads (e.g., by avoiding use of garbage disposals). Nutrient loading to groundwater is of concern based on cumulative effects and resulting contamination of potable groundwater water and excessive nutrient loadings into surface waters including through springs and groundwater lens ponds.

Encourage evaluation and implementation of alternative or innovative on-site sanitary waste systems to remediate on-site systems that currently do not adequately treat or separate effluent.

5.2 Minimize nonpoint pollution of coastal waters and manage activities causing nonpoint pollution.

Minimize nonpoint pollution of coastal waters using the following approaches, which are presented in order of priority.

- 1. Avoid nonpoint pollution by limiting nonpoint sources.
 - a. Reduce or eliminate introduction of materials which may contribute to nonpoint pollution.
 - b. Avoid activities which would increase off-site stormwater runoff and transport of pollutants.
 - c. Control and manage stormwater runoff to:
 - (1) minimize transport of pollutants, and
 - (2) restore sites to emulate natural stormwater runoff conditions where degraded stormwater runoff conditions exist, or
 - (3) achieve no net increase of runoff where unimpaired stormwater runoff conditions exist
 - d. Retain or establish vegetation to maintain or provide:

- (1) soil stabilization, and
- (2) filtering capacity in riparian and littoral zones
- e. Preserve natural hydrologic conditions.
 - (1) Maintain natural surface water flow characteristics.
 - (2) Retain natural watercourses and drainage systems where present.
 - (3) Where natural drainage systems are absent or incapable of handling the anticipated runoff demands:
 - (a) develop open vegetated drainage systems as the preferred approach and design these systems to include long and indirect flow paths and to decrease peak runoff flows
 - (b) use closed drainage systems only where site constraints and stormwater flow demands make open water systems infeasible
- 2. Reduce pollutant loads to coastal waters by managing unavoidable nonpoint sources and use appropriate best management practices as determined by site characteristics, design standards, operational conditions, and maintenance programs.

Reduce nonpoint source pollution using specific management measures appropriate to specific land use or pollution source categories.

This section presents summary management measures to apply to specific land use or pollution sources. These management measures are to be applied within the context of the prioritized approach of avoidance, reduction, and management presented in the previous policy section. Further information on specific management measures is contained in Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (U.S. EPA, 840-B-92-002).

- 1. Agriculture
 - a. Control soil erosion and contain sediment in order to avoid entry of soils into coastal waters.
 - b. Manage nutrient loadings by applying nutrients only in amounts needed for crop growth, avoiding nutrient applications which will result in nutrient loadings to coastal waters and tributaries.
 - c. Limit contamination of coastal waters from pesticides to the extent possible by applying pesticides only when economically appropriate and in a safe manner.
 - d. Manage irrigation and use of chemicals to avoid contamination of return flows with fertilizers, pesticides or their residues, or accumulated salts; and to prevent contamination of source waters by avoiding backflow of waters used to apply chemicals through irrigation.
- 2. Urban
 - a. For new development, manage total suspended solids in runoff to remain at predevelopment loadings.
 - b. For site development, limit activities that increase erosion or the amount or velocity of

- stormwater runoff.
 - c. For construction sites, reduce erosion and retain sedimentation on site, and limit and control use of chemicals and nutrients.
 - d. For new on-site sewage disposal systems, ensure that siting, design, maintenance, and operation prevent discharge of pollutants.
 - e. Plan, site, and design roads and highways to manage erosion and sediment loss, and limit disturbance of land and vegetation.
 - f. Plan, site, and design bridges to protect ecosystems.
 - g. For roads, highways, and bridges, minimize to the extent practical the runoff of contaminants to coastal waters.
3. Marinas
- a. Site and design marinas such that tides and/or currents will aid in flushing of the site or renew its water regularly.
 - b. Assess impact on water quality as part of marina siting and design. Do not site new marinas in Class SA waters.
 - c. Manage stormwater runoff, discharge of hazardous substances, and solid waste.
4. Hydromodifications
- a. Maintain the physical and chemical characteristics of surface waters, reduce adverse impacts, and, where possible improve the physical and chemical characteristics of surface waters in channels.
 - b. Minimize impacts of channelization and channel modification on instream and riparian habitat, and identify opportunities to restore habitat.
 - c. Use vegetative means, where possible, to protect stream banks and shorelines from erosion.
 - d. Manage wetlands that have been channelized to simulate natural hydrology.
5. Floatables and litter
- a. Prohibit all direct or indirect discharges of refuse or litter into waters of the state or upon public lands contiguous to and within 100 feet of waters of the state.
 - b. Limit entry of floatables to surface waters through containment and prevention of litter.
 - c. Remove and dispose of floatables and litter from surface waters and shorelines.
 - d. Implement pollution prevention and education programs to reduce discharge of floatables and litter into storm drains.

5.3 Protect and enhance water quality of coastal waters.

- A. Protect water quality based on an evaluation of physical factors (pH, dissolved oxygen, dissolved solids, nutrients, odor, color and turbidity), health factors (pathogens, chemical contaminants, and toxicity), and aesthetic factors (oils, floatables, refuse, and suspended solids).**

- B. Minimize disturbance of streams including their bed and banks in order to prevent erosion of soil, increased turbidity, and irregular variation in velocity, temperature, and level of**

water.

- C. **Protect water quality of coastal waters, estuaries, tidal marshes, and wetlands that are adjacent to and contiguous at any point to navigable waters from adverse impacts associated with excavation.**
- D. **Limit potential adverse impacts on water quality due to excavation or placement of fill using avoidance and minimization methods including reduction in scope of work and use of clean fill.**

5.4 Limit the potential for cumulative and secondary impact of watershed development and other activities on water quality and quantity.

A. Protect water quality by ensuring that watershed development results in:

- 1. protection of areas that provide important water quality benefits
- 2. maintenance of natural characteristics of drainage systems, and
- 3. protection of areas that are particularly susceptible to erosion and sediment loss

B. Limit the individual impacts associated with development to prevent cumulative water quality impacts which would lead to a failure to meet water quality standards.

5.5 Protect and conserve quality and quantity of potable water.

A. Prevent contamination of potable waters by limiting discharges of pollutants to maintain water quality according to water quality classification, and limiting land use practices which are likely to contribute to contravention of surface and groundwater quality classifications for potable water supplies.

B. Prevent depletion of existing potable water supplies by limiting saltwater intrusion in aquifers and estuaries, through conservation methods or restrictions on water supply use and withdrawals, and by allowing for recharge of potable aquifers.

C. Limit cumulative impact of development on groundwater recharge areas to ensure replenishment of potable groundwater supplies.

Policy 6 Protect and restore the quality and function of the waterfront area ecosystem.

6.1 Protect Significant Coastal Fish and Wildlife Habitats.

Significant Coastal Fish and Wildlife Habitats, identified as critical to the maintenance or re-

establishment of species of fish and wildlife in the coastal area and designated by the Secretary of State, must be protected for the habitat values they provide and to avoid permanent adverse changes to the coastal ecosystem.

Designated Significant Coastal Fish and Wildlife Habitats are described in individual Significant Coastal Fish and Wildlife Habitat narratives and outlined on boundary maps prepared by the Department of State. In Bethlehem, the Normans Kill has been designated as a Significant Coastal Fish and Wildlife Habitat.

The standards for this section are to be applied to any activity that is subject to consistency review under federal and state laws.

Uses or activities should be avoided which would:

- ▶ Destroy habitat values through direct physical alteration, disturbance, or pollution, or the indirect effects of actions which would result in a loss of habitat.
- ▶ Significantly impair the viability of a habitat beyond the tolerance range of fish and wildlife species through:
 1. Degradation of existing habitat elements
 2. Change in environmental conditions
 3. Functional loss of habitat values, or
 4. Adverse alteration of physical, biological, or chemical characteristics.

Where destruction or significant impairment of habitat values cannot be avoided, potential impacts of land use or development should be minimized through appropriate mitigation. Use mitigation measures which are likely to result in the least environmentally damaging feasible alternative.

Mitigation includes:

- a. avoidance of potential adverse impacts, including:
 1. avoiding ecologically sensitive areas
 2. scheduling activities to avoid vulnerable periods in life cycles or the creation of unfavorable environmental conditions
 3. preventing fragmentation of intact habitat areas
- b. minimization of unavoidable potential adverse impacts, including:
 1. reducing scale or intensity of use or development
 2. designing projects to result in the least amount of potential adverse impact
 3. choosing alternative actions or methods that would lessen potential impact
 4. specific measures designed to protect habitat values from impacts that cannot be sufficiently avoided or minimized to prevent habitat destruction or significant habitat

impairment

- c. specific protective measures included in the narratives for each designated Significant Coastal Fish and Wildlife Habitat area

Habitat Impact Assessment for Significant Coastal Fish and Wildlife Habitats:

A **habitat impairment test** must be met for any activity that is subject to consistency review under Federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific **habitat impairment test** that must be met is as follows.

In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:

- > destroy the habitat; or,
- > significantly impair the viability of a habitat.

Habitat destruction is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The *tolerance range* of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of parameters which should be considered in applying the habitat impairment test include but are not limited to the following:

1. physical parameters such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;

2. biological parameters such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and,

3. chemical parameters such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed below to assist in applying the habitat impairment test to a proposed activity.

Any activities that would substantially degrade water quality, increase turbidity or temperature, or alter water depths in the littoral zones, wetlands, and streams making up this habitat would result in significant impairment of the habitat. Bulkheading, dredging, and uncontrolled dredge spoil disposal would be especially detrimental in these areas. Barriers to fish migration, whether physical or chemical, would have significant impacts on fish populations in the area. Disturbance of vegetation on the steep slopes along the western edge of the floodplain area could result in soil erosion and sedimentation with subsequent impairment of fish habitat, and reduction of potential wildlife value of this area. Habitat disturbances would be most detrimental during fish spawning and incubation periods, which generally extend from April through July for most species. Significant development of the islands for residential or commercial uses would eliminate an unusual example of the original Hudson River floodplain ecosystem.

Expansion of agricultural activities may also result in a direct loss of valuable habitat area, but could be designed to maintain or enhance certain wildlife species. Development of appropriate public access to the area may be desirable to ensure that adequate opportunities for compatible human uses of the fish and wildlife resources are available.

6.2 Support the restoration of Significant Coastal Fish and Wildlife Habitats wherever possible so as to foster their continued existence as natural, self-regulating systems.

Measures which can be undertaken to restore significant habitats include:

- ▶ reconstructing lost physical conditions to maximize habitat values
- ▶ adjusting adversely altered chemical characteristics to emulate natural conditions, and
- ▶ manipulating biological characteristics to emulate natural conditions through re-introduction

of indigenous flora and fauna

6.3 Protect and restore freshwater wetlands.

Wetlands provide numerous benefits, including, but not limited to, the following: habitat for fish and wildlife; erosion and flood control; natural pollution treatment; groundwater protection; and aesthetic open space.

The following measures can further the protection or restoration of wetlands:

- ▶ Compliance with the statutory and regulatory requirements of the Freshwater Wetlands Act and the Stream Protection Act.
- ▶ Prevention of the net loss of wetlands by:
 - a. Avoiding placement of fill or excavation of wetlands.
 - b. Minimizing adverse impacts resulting from unavoidable fill, excavation or other activities.
 - c. Providing compensatory mitigation for adverse impacts which may result from unavoidable fill, excavation or other activities remaining after all appropriate and practicable minimization has been accomplished.
 - d. Providing and maintaining adequate buffers between wetlands and adjacent or nearby uses and activities in order to ensure protection of the wetlands character, quality, values and functions.

Policy 7 Protect and improve air quality in the waterfront area.

This policy provides for protection of the coastal area from air pollution generated within the coastal area or adversely affecting coastal air quality.

7.1 Control or abate existing, and prevent new air pollution.

A. Limit pollution resulting from new or existing stationary air contamination sources, consistent with:

1. attainment or maintenance of any applicable ambient air quality standard

2. applicable New Source Performance Standards
3. applicable control strategy of the State Implementation Plan, and
4. applicable Prevention of Significant Deterioration requirements

B. Recycle or salvage air contaminants using best available air cleaning technologies.

C. Limit pollution resulting from vehicular or vessel movement or operation, including actions which directly or indirectly change transportation uses or operation, consistent with attainment or maintenance of applicable ambient air quality standards, and applicable portions of any control strategy of the State Implementation Plan.

D. Restrict emissions of air contaminants to the outdoor atmosphere which are potentially injurious to human, plant, or animal life or property, or unreasonably interfere with the comfortable enjoyment of life or property.

E. Limit new facility or stationary source emissions of acid deposition precursors consistent with achieving final control target levels for wet sulfur deposition in sensitive receptor areas, and meeting New Source Performance Standards for the emissions of oxides of nitrogen.

7.2 Limit discharges of atmospheric radioactive material to a level that is as low as practicable.

7.3 Capture and recycle chloroflourocarbon compounds during service and repair of air-conditioning and refrigeration units to the greatest extent possible.

7.4 Limit sources of atmospheric deposition of pollutants, particularly from nitrogen sources.

Policy 8 Minimize environmental degradation in the waterfront area from solid waste and hazardous substances and waste.

Development of the Coastal Area has resulted in contamination of some riverfront parcels, particularly from industrial uses found in the North Riverfront District. Former landfills may produce leachates which degrade both surface and groundwater sources. A variety of substances, ranging from improperly disposed motor oils to industrial waste dumps, may pose immediate problems and can preclude or delay appropriate reuse of coastal lands. Smaller and more incremental solid waste problems arise from littering.

The intent of this policy is to protect people from sources of contamination and to protect coastal resources from degradation through proper control and management of wastes and hazardous materials. In addition, this policy is intended to promote the expeditious remediation and reclamation of hazardous waste sites in developed centers to permit redevelopment.

8.1 Manage solid waste to protect public health and control pollution.

- A. Solid wastes are those materials defined under ECL §27-0701 and 6 NYCRR Part 360-1.2.**
- B. Plan for proper and effective solid waste disposal prior to undertaking major development or activities generating solid wastes.**
- C. Manage solid waste in accordance with the following solid waste management priorities:**
 - 1. Reduce the amount of solid waste generated.
 - 2. Reuse material for the purpose for which it was originally intended or recycle material that cannot be reused.
 - 3. Use land burial or other approved methods to dispose of solid waste that is not being reused or recycled.
- D. Create and support a market for maximum resource recovery by using materials and products manufactured with recovered materials, and recovering materials as a source of supply for manufacturing materials and products.**
- E. Prevent the discharge of solid wastes into the environment by using proper handling, management, and transportation practices.**
- F. Operate solid waste management facilities to prevent or reduce water pollution, air pollution, noise pollution, obnoxious odors, litter, pest infestation, and other conditions harmful to the public health.**

8.2 Manage hazardous wastes to protect public health and control pollution.

- A. Hazardous wastes are those materials defined under ECL §27-0901 and 6 NYCRR Part 371.**
- B. Manage hazardous waste in accordance with the following priorities:**
 - 1. Eliminate or reduce generation of hazardous wastes to the maximum extent practical.
 - 2. Recover, reuse, or recycle remaining hazardous wastes to the maximum extent practical.
 - 3. Use detoxification, treatment, or destruction technologies to dispose of hazardous wastes which cannot be reduced, recovered, reused, or recycled.
 - 4. Phase out land disposal of industrial hazardous wastes.
- C. Ensure the maximum safety of the public from hazards associated with hazardous wastes through the proper management and handling of industrial hazardous waste treatment,**

storage, and disposal.

D. Remediate inactive hazardous waste disposal sites.

1. Expedite remediation of substances hazardous in developed centers to permit redevelopment of the sites.
2. Select a remediation remedy at a particular site to ensure that the public health and the environment will be protected. The future use of a site may determine the selected cleanup levels.

8.3 Protect the environment from degradation due to toxic pollutants and substances hazardous to the environment.

A. Substances hazardous to the environment are defined under ECL §37-0101. Toxic pollutants are defined under ECL §17-0105.

B. Prevent release of toxic pollutants or substances hazardous to the environment which would have a deleterious effect on fish and wildlife resources.

C. Prevent environmental degradation due to persistent toxic pollutants:

1. Limit discharges of bioaccumulative substances.
2. Avoid resuspension of toxic pollutants and hazardous substances and wastes and re-entry of bioaccumulative substances into the food chain from existing environmental sources.

D. Prevent and control environmental pollution due to release of radioactive materials as defined under 6 NYCRR Part 380.

E. Protect public health, public and private property, and fish and wildlife from inappropriate use of pesticides.

1. Pesticides are those substances defined under ECL §33-0101 and 6 NYCRR Part 325.
2. Limit use of pesticides to effectively target actual pest populations as indicated through integrated pest management methods.
3. Prevent direct or indirect entry of pesticides into waterways.
4. Minimize exposure of people, fish, and wildlife to pesticides.

F. Report, respond to, and take action to correct all unregulated releases of substances hazardous to the environment.

8.4 Prevent and remediate discharge of petroleum products.

- A. Minimize adverse impacts from potential oil spills by appropriate siting of petroleum off-loading facilities.**
- B. Demonstrate that an adequate plan for prevention and control of petroleum discharges is in place at any major petroleum-related facility.**
- C. Prevent discharges of petroleum products by following methods approved for handling and storage of petroleum products and using approved design and maintenance principles for storage facilities.**
- D. Clean up and remove any petroleum discharge.**

Undertake clean-up and removal activities in accordance with the guidelines contained in the New York State Water Quality Accident Contingency Plan and Handbook and the procedures specified in the New York State Water Quality Accident Contingency Plan and Handbook.

- 1. Give first priority to minimizing environmental damage:
 - a. Respond quickly to contain petroleum spills.
 - b. Contain discharges immediately after discovery.
- 2. Recover and recycle petroleum discharges using the best available practices.

8.5 Transport solid waste and hazardous substances and waste using routes and methods which protect the safety, well-being, and general welfare of the public and the environmental resources of the state; and protects continued use of all transportation corridors and highways and transportation facilities.

8.6 Site solid and hazardous waste facilities to avoid potential degradation of coastal resources.

- A. Solid and hazardous waste facilities should not be located within the coastal area unless there is a demonstrated need for waterborne transport of waste materials and substances.**
- B. If the need for a coastal location is demonstrated, preclude impairment of coastal resources from solid and hazardous waste facilities by siting these facilities so that they are not located in or would not adversely affect:**
 - 1. agricultural lands
 - 2. natural protective feature areas
 - 3. surface waters, primary water supply, or principal aquifers
 - 4. designated Significant Coastal Fish and Wildlife Habitats
 - 5. habitats critical to vulnerable fish and wildlife species, vulnerable plant species, and rare ecological communities, and
 - 6. wetlands

PUBLIC WATERFRONT POLICIES

Policy 9 Provide for public access to, and recreational use of, waterfront waters, public lands, and public resources of the waterfront area.

Existing public access and opportunities for recreation at the water's edge is limited to Henry Hudson Park. Many residents expressed a strong desire to develop greater access. One of the recommendations of the LWRP is to develop a riverfront trail along the 10 miles Hudson Riverfront, but still recognizing that some points of the trail will need to follow existing roadways. Given the lack of riverfront public access and recreation, this policy incorporates measures needed to provide public access throughout the coastal area. The need to maintain and improve existing public access and facilities is the first of these measures, and is necessary to ensure that use of existing access sites and facilities is optimized in order to accommodate existing demand. The second measure is to capitalize on all available opportunities to provide additional visual and physical public access along with appropriate opportunities for recreation.

This policy calls for a balance among the following factors: the level of access to a resource or facility; the capacity of a resource or facility; and the protection of natural resources. When reviewing subdivision proposals or site plans, the Planning Board or other agency of the Town will carefully examine plans for development of riverfront sites and will negotiate for public access to the water.

It is important in the Town to protect, maintain and increase pedestrian and, where appropriate, vehicular access to public water-related recreation resources and facilities, including opportunities for boating (including excursion boats and ice boats), fishing and appreciation of scenic vistas.

The following guidelines will be used in determining the consistency of a proposed action with this policy.

1. The existing access from public lands or facilities to public water-related resources and facilities shall neither be reduced, nor should the possibility of increasing access in the future from public lands or facilities to public water-related recreation resources and facilities be eliminated, unless there is a significant threat to public safety from a current or proposed use.
2. Any proposed project to increase public access to public water-related recreation resources and facilities shall be analyzed according to the following factors:
 - a. The level of access to be provided should be in accord with estimated public use.
 - b. The level of access to be provided shall not cause a degree of use which would exceed the physical capability of the resource of facility.
 - c. The level or type of use shall be conditioned on the requirements of public safety.
3. A State or Federal agency will not undertake or fund any new project which increases access to a water-related resource or facility that is not open to all members of the public.
4. The following activities will not be permitted unless the actions are found necessary for, or to be of great benefit to, or for the common good of Town residents.

- a. Construction of public facilities which physically prevent the provision of convenient public access to public water-related recreation resources and facilities.
 - b. Construction of private facilities which physically prevent the provision of convenient public access to public water-related recreation resources or facilities from public lands and facilities.
 - c. Sale, lease, or other transfer of public lands that could provide public access to a public water-related recreation or facility.
5. Land use policies of the Town and zoning districts must be evaluated in terms of traffic impacts, as well as in terms of effects on: protection of ground and surface waters; protection of historic and scenic areas; preservation of environmentally sensitive features; and development in coastal areas should be limited to levels that will not burden roads or cause congestion or safety problems. Continuation of the predominance of limited to low density zoning and maintenance of the low density residential and agricultural uses in the waterfront area will serve to lessen potential impacts of future traffic.

9.1. Promote appropriate physical public access and recreation throughout the coastal area.

A. Provide a level of public access and type of recreational use which takes into account the following factors:

1. proximity to population centers
2. public demand for access and recreational use
3. type and sensitivity of natural resources affected
4. purpose of public institutions which may exist on the site
5. accessibility to the public access site or facility
6. the needs of special groups such as the elderly and persons with disabilities
7. the potential for adverse impacts on adjacent land uses

B. Provide convenient, well-defined physical public access to and along the coast for water-related recreation.

C. Protect and maintain existing public access and water-related recreation facilities.

1. Prevent physical deterioration of facilities due to lack of maintenance or overuse.
2. Prevent any on-site or adjacent development project or activity from directly or indirectly impairing physical public access and recreation or adversely affecting its quality.
3. Protect and maintain established access and recreation facilities.
4. Protect and maintain the infrastructure supporting public access and recreational facilities.

D. Provide additional physical public access and recreation facilities at public sites throughout the coastal area.

1. Promote acquisition of additional public park lands to meet existing public access and recreation needs
2. Provide for public access and recreation facilities on non-park public riverfront lands as a secondary use.
3. Provide for public access at streets terminating at the shoreline
4. Provide access and recreation facilities to all members of the public whenever access or recreation is directly or indirectly supported through federal or state projects or funding.
5. Retain a public interest which will be adequate to preserve public access and recreation opportunities in publicly owned lands immediately adjacent to the shore in any transfer of public lands.

E. Provide physical access linkages among public access sites, open space areas, public trust lands, and nearshore surface waters.

This standard promotes expansion of a network of recreational opportunities through physical linkages that would establish the proposed riverfront trail network for Bethlehem.

F. Provide physical public access to, and/or water-related recreation facilities on, coastal lands and waters whenever development or activities are likely to affect the public's use and enjoyment of public coastal lands and waters. Provide incentives to private development projects which provide public access and/or water-related recreation facilities. Establish such provisions in the Town's Zoning Law.

G. Restrict public access and recreation only where incompatible with public safety and protection natural resources.

9.2 Provide public visual access to coastal lands and waters or open space at all sites where physically practical.

A. Avoid loss of existing visual access.

1. Limit physical blockage of existing visual access by development or activities due to the scale, design, location, or type structures.
2. Protect view corridors provided by streets and other public areas leading to the coast.
3. Protect visual access to open space areas associated with natural resources.

B. Minimize adverse impact on visual access.

1. Provide for view corridors to the coast in those locations where new structures would block

views of the coast from inland public vantage points.

2. Use structural design and building siting techniques to preserve or retain visual access and minimize obstruction of views.
3. Visual access requirements may be reduced where site conditions, including vegetative cover or natural protective features, block potential views.
4. Vegetative or structural screening of an industrial or commercial riverfront site is allowed if the resulting overall visual quality outweighs the loss of visual access.

C. Provide compensatory mitigation for loss of visual access.

1. Provide public visual access from vantage points on the site where development of the site blocks visual access from inland public vantage points.
2. Provide for additional and comparable visual access at nearby locations if physical access cannot be provided on-site.

D. Increase visual access to the coast whenever practical.

1. Provide pulloffs along public roads at appropriate locations to enhance opportunities for visual access to coastal lands and waters.
2. Provide interpretative exhibits at appropriate locations for visual access to enhance public understanding and enjoyment of views of coastal lands and waters and its associated water-dependent uses.
3. Provide visual access to areas of high visual quality including community riverfronts, water-dependent uses, agriculture, natural resources, and panoramas.

9.3 Preserve public interest in and use of lands and waters held in public trust by the state and other government levels.

A. Limit grants, leases, easements, permits or lesser interest in lands underwater in accordance with an assessment of potential adverse impacts of the proposed use, structure, or facility on public interest in public lands under water. Use the following factors in assessing potential adverse impact:

1. environmental impact
2. values for natural resource management, public recreation, and commerce
3. size, character, and effect of the transfer in relation to neighboring uses
4. potential for interference with navigation, public uses of waterway, and riparian rights
5. effect of the transfer of interest on the natural resources associated with the lands
6. water-dependent nature of use
7. adverse economic impact on existing commercial enterprises, and
8. consistency with the public interest for purposes of navigation and commerce, fishing, bathing, and access to navigable waters and the need of the owners of private property to

safeguard development

- B. Limit the transfer of interest in public trust lands to the minimum necessary conveyance of public interest.**
 - 1. Provide the minimum conveyance using the legal instrument which results in the least abrogation of public interest.
 - 2. Limit the physical extent of any conveyance to the minimum amount of land necessary.
 - C. Grants in fee of underwater lands are limited to exceptional circumstances.**
 - D. Retain a public interest in the transfer of interest in underwater lands which will be adequate to preserve public access, recreation opportunities, and other public trust purposes.**
 - E. Private uses, structures, or facilities on underwater lands are limited to those circumstances where ownership of the underwater lands or riparian interest has been legally validated either through proof of ownership of the underwater lands or adjacent riparian parcel, or by assignment of riparian interest by the riparian owner.**
 - F. Avoid substantial loss of public interest in public trust lands by assessing the cumulative impact of individual conveyances of grants, easements, and leases of public trust lands.**
 - G. Resume and re-establish public trust interests in existing grants which are no longer being exercised according to terms of the grant, or where the use is not in conformity with the public trust doctrine.**
- 9.4 Assure public access along public trust lands below the line of mean high water and maintain navigable waters.**
- A. Provide free and substantially unobstructed passage along public trust shorelands.**
 - B. Interference with passage along the shoreline is limited to the minimum extent necessary to gain access from the upland to the water.**
 - C. Provide passage around interferences on public trust lands through adjacent upland easements or other mitigation where public access is substantially impeded.**
 - D. Require that all publicly owned land allow for perpendicular access to trust lands whenever compatible with the principal use of the public land.**
 - E. Provide access to, and reasonable recreational use of, navigable waters and public trust lands under water.**

1. Provide for free and unobstructed public use of all navigable waters below the line of mean high water for navigation, recreation, and other public trust purposes, including the incidental rights of public anchoring.
2. Allow obstruction of public use, including navigation, in navigable waters:
 - a. for water-dependent uses involving navigation and commerce which require structures or activities in water as part of the use
 - b. for commercial recreational boating facilities, provided that the loss of navigable waters and use of underwater lands is offset by sufficient public benefits
 - c. in order to gain reasonable access to navigable waters from riparian lands
3. Obstruction of navigable waters and underwater lands is limited:
 - a. to the extent that it interferes with commercial navigation. The right of commercial navigation is superior to all other uses on navigable waters and may not be obstructed.
 - b. to the minimum necessary for access to navigable waters. The minimum is determined by evaluating the following factors:
 - (1) the extent of the use's dependence on access to navigable waters
 - (2) the range of tidal water level fluctuation
 - (3) the size and nature of the body of water
 - (4) the nature of public use of the adjacent waters
 - (5) the traditional means of access used by surrounding similar uses
 - (6) whether or not alternative means to gain access are available

Piers, docking facilities, and catwalks must not result in an unnecessary interference with use of public trust lands. Alternatives to long piers or docks include use of dinghies to reach moored boats and mooring in nearby marinas, but generally not dredging to accommodate boat draft.
 - c. by extent and characteristics of the developable adjacent upland area and its ability to support in-water development for the water-dependent use
 - d. by potential adverse effects on natural resources and their uses, and
 - e. by potential adverse effects on public safety.
4. Structures extending beyond the minimum necessary for access to navigable waters impair public trust interests and open space values associated with the water's surface. Allow such structures only in the following circumstances:
 - a. when necessary for practical and convenient operation of water-dependent industry or commerce, and provided that obstruction of commercial navigation does not result
 - b. for commercial recreational boating facilities provided that:
 - (1) the loss of navigable waters and use of underwater lands is offset by sufficient public benefit, and
 - (2) obstruction of commercial navigation does not result
 - c. when the principal purpose of the structure is necessary:
 - (1) to provide public access for recreational uses
 - (2) for improvements for navigation

- (3) for protection from coastal hazards, or
- (4) for essential public transportation and transmission facilities

9.5 Provide access and recreation which is compatible with natural resource values.

A. Provide appropriate access and associated recreational activity that will avoid potential adverse impacts on natural resources. Use the following factors in determining the potential for adverse environmental effects:

- 1. Intensity of the associated recreational, scientific, or educational activity
- 2. Level of likely disturbance associated with the proposed activity. The following types of access or associated activities are listed in decreasing order of potential for disturbance:
 - (1) Motorized activities
 - (2) Active, non-motorized activities, including water-dependent and water-related uses
 - (3) Passive activities
 - (4) Avoidance of the area
- 3. Sensitivity of the natural resources involved and the extent of the ecological benefits associated with avoidance of the area.

B. Limit public access and recreational activities where uncontrolled public use would lead to impairment of natural resources.

- 1. Establish appropriate seasonal limitations on access and recreation in order to minimize adverse impacts on fish and wildlife species.
- 2. Provide stewardship which is capable of controlling anticipated adverse impacts before providing public access.
- 3. Physically limit or avoid provision of public access to natural resource areas whose principal values are based on the lack of human disturbance.
- 4. Provide educational, interpretive, research, and passive uses of natural resources through appropriate design and control of public access and recreation.

C. Provide public access for fish and wildlife resource related activities, including fishing and hunting, provided that the level of access would not result in a loss of resources necessary to continue supporting these uses.

D. Provide access using methods and structures which maintain and protect open space areas associated with natural resources. Determine the extent of visual and physical impairment by structures extending through these open space areas based on:

- 1. the value of the open space as indicated by unfragmented size or mass of the wetland or other natural resources, distance to navigable water, and wetland value, and

2. the size, length, and design of proposed structures

WORKING WATERFRONT POLICIES

Policy 10 Protect water-dependent uses and promote siting of new water-dependent uses in suitable locations.

The intent of this policy is to protect existing water-dependent commercial, industrial in the North Riverfront District (north of the PSEG plant), and recreational uses and to promote their future siting in accordance with the reasonably expected demand for such uses. It is also the intent of this policy to foster orderly water use management to address the problems of conflict, congestion, and competition for space in the use of surface waters and underwater lands.

Existing land use patterns characterize the riverfront as three separate areas. More intensely developed areas characterize the North Riverfront Area, which includes commercial and industrial operations, and the Albany Port Authority. The North Riverfront will continue to service the needs of industrial operations. Over time the North Riverfront District will reemerge as a mixed-use commercial, professional, and high-density residential district, with marina facilities. The Central Riverfront District is largely defined by its relatively undeveloped areas with unique historical and ecological value, and also includes the only public access to the Hudson River at Henry Hudson Park; recreational boaters, recreational viewing of the river and fisherman are currently the primary users of the Central Riverfront. The South Riverfront District is defined as bucolic and natural; future land uses will focus on expressing the rich history in the Town and the region as well as the ecological value of the riverfront. There are no retail commercial or industrial uses located adjacent to the River in either the Central or South Riverfront Districts.

When reviewing subdivision proposals or site plans, the Planning Board or other agency of the Town will carefully examine plans for development of riverfront sites and will negotiate for public access to the water. Establish provisions for this in the Town's zoning regulations.

The following guidelines will be utilized in promoting and facilitating compatible water-dependent uses in Bethlehem:

1. Water-dependent uses that are compatible with the natural and built environment and will not negatively impact the natural, scenic or historic resources of the Town will be favored when considering new developments.
2. Water-dependent use will not cause significant adverse impacts to community and surrounding land and water resources, particularly the project will not cause adverse impacts to the surrounding community with introductions of, or increases in, odors, noise or substantial traffic.
3. If, or when, publicly-owned property within the riverfront area becomes available for re-use, water-dependent uses will be considered first. Water-enhanced uses will be given second priority.
4. Permit procedures for the development of water-dependent uses will be facilitated when consistent with planning objectives.

5. Uses which are water-enhanced will be encouraged within the riverfront area, but not at the expense of water-dependent uses.
6. If there are no immediate demands for water-dependent uses within the riverfront area, but future demands are foreseeable, temporary non-water-dependent uses will be considered.

In promoting water-dependent uses, the following kinds of actions will be considered:

1. Favored treatment to areas for proposed compatible water-dependent uses with respect to use of public investment. Particular priority will be given to the construction and maintenance of docking facilities (both commercial and recreational), roads, sewer and water lines, and public transportation within areas appropriate for compatible water-dependent uses. Preference for these investments will be given to the North Riverfront District, where more intense uses are being encouraged.
2. Where areas suitable for water-dependent uses are publicly-owned, favored leasing arrangements will be considered for suitable or compatible water-dependent uses, if appropriate.
3. Local planning and economic development agencies will work with the State to actively promote suitable water-dependent uses on appropriate sites.
4. Local agencies will work together with State and Federal agencies to streamline permitting procedures that may be burdensome to compatible water-dependent uses.

In addition to water-dependent uses, uses which are enhanced by a riverfront location should be encouraged to locate along the shore, though not at the expense of water-dependent uses. A water-enhanced use is defined as a use that has no critical dependence on obtaining a riverfront location, but the profitability of the use and/or the enjoyment level of the users would be increased significantly if the use were adjacent to, or had visual access to, the riverfront. A public park or mixed use development project that uses good site design to take advantage of a riverfront view are two examples of water-enhanced uses. Actions should be avoided which would adversely impact or interfere with existing water-dependent uses. Adverse impacts of new and expanding water-dependent uses should be minimized.

Water-dependent uses should be sited in locations where:

- ▶ the need for dredging is minimized;
- ▶ waterside and landside access, as well as upland space for parking and other facilities, is adequate;
- ▶ the necessary infrastructure exists or is easily accessible, including adequate shoreline stabilization structures, roads, water supply and sewage disposal facilities, and vessel waste pump-out and waste disposal facilities; and
- ▶ water quality classifications are compatible.

10.1 Improve the economic viability of water-dependent uses

Many water-dependent uses often contain and are supported by non-water-dependent uses that are complementary and supportive to the water-dependent use and do not impair the ability of water-dependent uses to function. These non-water-dependent uses often mix compatibly with water-dependent uses, provide beneficial support, and positively affect the working riverfront character.

Non-water-dependent accessory or mixed-use developments may be allowed, provided:

- ▶ accessory uses are subordinate and functionally related to the principal water-dependent use and contribute to sustaining the water-dependent use;
- ▶ mixed-uses subsidize the water-dependent use and are accompanied by a demonstrable commitment to continue operation of the water-dependent use;
- ▶ uses are sited and operated so as not to interfere with the principal operation of the site for a water-dependent use;
- ▶ uses do not preclude future expansion of a water-dependent use; and
- ▶ uses will not cause adverse impacts to the surrounding community with introductions of, or increases in, odors, noise or substantial traffic.

Locations that exhibit important natural resource values, such as significant resources, such as wetlands and fish and wildlife habitats or hold historic or open space significance, should be avoided.

10.2 Allow water-enhanced uses which complement or improve the viability of water-dependent uses and surrounding land uses.

Water-enhanced uses are activities that do not require a location on the riverfront to function, but whose location on the riverfront could add to public enjoyment and use of the water's edge, if properly designed and sited. Water-enhanced uses are generally of a recreational, cultural, commercial, or retail nature.

When determining if a water-enhanced use is appropriate for siting along a riverfront, the following factors should be considered:

- ▶ the use would provide an economic incentive to prevent the loss of a water-dependent use;
- ▶ the use would be sited and operated so as not to interfere with water-dependent uses;

- ▶ the use would be sited in a manner which does not preclude future expansion of a water-dependent use;
- ▶ the activity makes beneficial use of a shoreline location through siting and design to increase public enjoyment of the riverfront and enhance community character; and the use will not cause adverse impacts to the surrounding community with introductions of, or increases in, odors, noise or substantial traffic.

Policy 11 Promote sustainable use of living marine resources in the waterfront area.

Since no commercial fishing operations exist in Bethlehem, this policy has limited applicability for the Town of Bethlehem.

Commercial and recreational uses of living marine resources constitute an important contribution to the economy of the state. The Wildlife Management Areas program is part of a long term effort to establish permanent access to lands in New York State for the protection and promotion of its fish and wildlife resources. Wildlife Management Areas (WMAs) are lands owned by New York State under the control and management of the Department of Environmental Conservation's Division of Fish, Wildlife and Marine Resources. These lands have been acquired primarily for the production and use of wildlife. The Town of Bethlehem is located in the NYS Department of Conservation Region 4 Wildlife Management Unit.

Continued use of living resources depends on maintaining long-term health and abundance of fisheries resources and their habitats, and on ensuring that the resources are sustained in usable abundance and diversity for future generations. This requires the state's active management of fisheries, protection and conservation of habitat, restoration of habitats in areas where they have been degraded, and maintenance of water quality at a level that will foster occurrence and abundance of these resources. Allocation and use of the available resources must: (1) be consistent with the restoration and maintenance of healthy stocks and habitats, and (2) maximize the benefits of resource use so as to provide valuable recreational experiences and viable business opportunities for commercial and recreational fisheries.

11.1 Ensure the long-term maintenance and health of living marine resources.

Ensure that recreational use of living marine resources is managed in a manner that:

- ▶ places primary importance on maintaining the long-term health and abundance of fisheries;
- ▶ results in sustained useable abundance and diversity of the resource;
- ▶ does not interfere with population and habitat maintenance and restoration efforts;
- ▶ uses best available scientific information in managing the resources; and
- ▶ minimizes waste and reduces discard mortality of fishery resources.

Ensure that the management of the state's transboundary and migratory species is consistent with interstate, state-federal, and interjurisdictional management plans.

Protect and manage native stocks and restore sustainable populations of indigenous fish and wildlife species and other marine living resources.

Protection of native stocks includes protecting the genetic integrity of recognizable native populations which can be placed at risk by inappropriate stocking. Native stocks also need to be protected from adverse impacts due to introduction of nonindigenous species.

Foster occurrence and abundance of marine resources through:

- ▶ protection of spawning grounds, habitats, and water quality
- ▶ enhancement and restoration of fish and shellfish habitat

11.2 Provide for recreational use of coastal fisheries.

Maximize the benefits of resources to provide:

- ▶ valuable recreational resource experience, and

Where fishery conservation and management require actions that would result in resource allocation impacts, ensure equitable distribution of impact among user groups, giving priority to existing fisheries in the State.

Protect public health and marketability of resources from contamination.

- ▶ Advise the public regarding health risks of consuming seafood contaminated with toxics.
- ▶ Restrict harvest of fish and shellfish when they are contaminated with toxics exceeding established public health thresholds.
- ▶ Maintain water quality and wholesomeness of fishery and marketable marine resources to protect public health.
- ▶ Foster direct public recreational use of marine resources along shorelines, bays, and surface waters.

Provide adequate infrastructure to meet recreational needs including appropriate fishing piers, dockage, parking, and livery services.

Policy 12 Protect agricultural lands in the waterfront area.

Land used for agriculture can be found throughout the waterfront area of the Town. Many of the farms are included in the State Agricultural District Program (see “Agricultural Resources Map” in Section II) pursuant to the NYS Agriculture and Markets Law. These lands are generally in the South and Central Waterfront Areas. The intent of this policy is to conserve and protect agricultural land in the waterfront area by encouraging their continued use and to protect the scenic and open space values associated with such lands.

This policy requires a concern for the loss of any important agricultural land. However, the primary concern must be with the loss of agricultural land when that loss would have a significant effect on an agricultural area's ability to continue to exist, to prosper, and even to expand. In the Town of Bethlehem’s WRA, these agricultural lands are also critically important to defining the bucolic and pastoral setting of both the South and Central Riverfront Districts.

12.1 Protect existing agriculture and agricultural lands from conversion to other land uses, which would eliminate agricultural production or potential agricultural production.

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For the purposes of this policy, agricultural lands are defined as follows:

Lands included in agricultural districts as created under Article 25 - AA of the Agricultural and Markets Law; lands comprised of soils classified in soil groups 1,2,3, or 4 according to the NYS Department of Agriculture and Markets Land Classification System; or lands used in agricultural production, as defined in Article 25-AA of the Agriculture and Markets Law.

Elimination of agricultural production due to conversion to other land uses, primarily residential, is often a threat to agricultural lands. Conversion can occur through piecemeal or cumulative physical loss of land to development. In addition to the direct conversion of agricultural land, indirect threats contribute to the conversion of agricultural land to other uses. Indirect threats include: incompatibility of new development with existing farming, actions that divide active farmland, prohibitions against sound farm practices which are potentially incompatible with non-farm uses, and loss of prime soil by contamination or erosion.

12.1 Preserve scenic and open space values associated with agricultural lands.

Scenic and open space values associated with agricultural lands should be protected. Farming, as an element of landscape, is a particularly important contribution to the special character of the South and Central Riverfront Districts. Development shall be located and arranged to maximize protection of agricultural land in large contiguous tracts to protect associated scenic and open space values.

Policy 13 Promote appropriate use and development of energy and mineral resources.

This policy is divided into five sections. The first calls for conservation of energy resources. Section 2 addresses alternative energy sources. Section 3 provides standards to ensure maximum efficiency and minimum environmental impacts when siting energy facilities. Section 4 presents standards to minimize the impact of large fuel storage facilities. The last section addresses mineral extraction.

13.1 Conserve energy resources.

A. Promote energy efficient modes of transportation.

1. Promote and maintain rail freight facilities.
2. Promote and maintain facilities to support the link between harbor and rail freight.
3. Promote and maintain facilities for waterborne cargo and passenger transportation.
4. Integrate access to mass transit facilities and, where feasible, provide secure bicycle parking and safe bicycle lanes in new development projects.

B. Plan and construct sites using energy efficient design. Energy efficient design includes consideration for solar utilization, protection from wind, and landscaping for thermal control.

C. Promote greater energy generating efficiency through design upgrades of existing facilities.

13.2 Promote alternative energy sources that are self-sustaining, including solar and wind powered energy generation.

- A. Avoid interference with coastal resources and processes, including interference with migratory birds, from wind farm developments.**
- B. There are no existing hydroelectric power generation facilities in the coastal area. The potential for small hydroelectric power generation facilities should not be discounted for the area, however, if the potential adverse impacts on natural resources and the financial costs are determined to be minimized to an acceptable degree.**

13.3 Ensure maximum efficiency and minimum adverse environmental impact when siting major energy generating facilities.

A. Major energy generating facilities may be sited in a coastal location where a clear public benefit is established using the following factors:

1. There is a demonstrated need for the facility.
2. The facility will satisfy additional electric capacity needs or electric system needs,
3. Alternative available methods of power generation and alternative sources of energy cannot reasonably meet the public need.
4. Upgrades of existing facilities cannot reasonably meet the public need.
5. The facility incorporates feasible public recreational uses.

B. Achieve maximum transmission efficiency by siting major energy generating facilities close to load centers.

C. Preclude the potential degradation of coastal resources by siting and constructing new electric energy generating and transmission facilities so that they would not adversely affect:

1. commercial navigation
2. commercial and recreational fishing
3. agricultural lands
4. designated Significant Coastal Fish and Wildlife Habitats
5. habitats critical to vulnerable fish and wildlife species, vulnerable plant species, and rare ecological communities
6. wetlands
7. historic resources, and
8. scenic resources

13.4 Minimize adverse impacts from fuel transport and storage facilities.

A. Prohibit the production, storage, or retention of petroleum products in earthen reservoirs.

B. Liquefied Natural Gas facilities must be safely sited and operated. Factors to be used in determining the appropriateness of a location for Liquefied Natural Gas facilities include:

1. the density of population in neighboring areas
2. the density of population of areas neighboring the delivery route
3. the risk of accident during transportation
4. the maximum distance that a liquefied natural or petroleum gas vapor cloud is projected to expand and pose a threat to the public
5. the flammability or explosiveness of a cloud formed by vaporizing liquefied natural or petroleum gas
6. 100-year flood zones
7. areas with soils that cannot support static and dynamic loading without excessive lateral or vertical movement
8. areas exposed to severe wave and wind forces
9. the geologic stability of the site
10. the need for the facility
11. the potential environmental impacts
12. reasonable alternative locations for the proposed facility

Because of the high potential for hazard associated with liquid natural gas facilities, these facilities are subject to stringent regulation. The standards listed here are derived from federal and state regulations which have been instituted to protect public safety.

C. Protect natural resources by preparing and complying with an approved oil spill contingency plan.

13.5 Minimize adverse impacts associated with mineral extraction.

A. Factors to be used in determining the appropriateness of a commercial mining operation include:

1. compatibility with adjacent uses
2. loss of use of the site for other potential uses
3. alteration of coastal geological landforms
4. impact on designated sole-source aquifers
5. adverse impact on natural resources
6. degradation of visual quality

B. Removal of soils and overburden requires appropriate site preparation and subsequent site

reclamation in accordance with an approved plan for the suitable use of affected lands, including:

1. drainage and water control to reduce soil erosion
2. proposed future use of the affected lands, and
3. specific activities, including:
 - a. revegetation
 - b. disposal of refuse or spoil
 - c. drainage and water control features
 - d. grading and slope treatment
 - e. proposals for the prevention of pollution and the protection of the environment

C. Limit subaqueous sand and gravel extraction to activities necessary for navigation or erosion control.

Section 4

Section 4

4.1 INTRODUCTION

With this Local Waterfront Revitalization Program, the Town of Bethlehem is prepared to take on the challenges of the 21st Century—to embrace change and further enhance the Capital Region’s growing reputation as a highly desirable place to not only live and work, but also to visit and experience history, culture and the environment. The program outlined here provides a framework to build a strong system of connected, high-quality private investment areas intertwined with distinctive public spaces. The program establishes a blueprint that connects neighborhoods, cultural and environmental areas, and commercial establishments. It also provides measures to preserve and expand access to the Hudson River. The intent is to form a basis for first-rate public and private development that connects neighborhoods, cultural and environmental areas and commercial establishments, all while enhancing the environmental beauty and cultural opportunities provided here.



*The future belongs to those who believe
in the beauty of their dreams.*
- Eleanor Roosevelt

To help achieve the vision outlined in the Town’s 2005 Comprehensive Plan, Bethlehem has turned its energy and resources to one of the region’s unique and valuable assets—its broad and diverse riverfront. From its passive recreation opportunities available at Henry Hudson Park to its active port-supporting industries, from its small hamlet areas to its unique environmental and cultural amenities, Bethlehem is reconnecting with its roots and managing future growth pressures to protect the uniquely high quality of life offered in the riverfront areas. For many in the community, the Town’s riverfront areas represent the future, an opportunity to capitalize on existing strengths and opportunities, while charting a new course and achieving new heights. Others recognize these areas as special and unique to the region. This LWRP is the unifying element that will guide local decision makers and weave together these various expectations.

The Riverfront has been divided into three separate areas based on existing land use patterns: North Riverfront, Central Riverfront and South Riverfront. The proposed uses and initiatives outlined here have the potential to stimulate reinvestment in the riverfront areas for a variety of uses. The **North Riverfront** will be an area of higher intensity uses. The **South Riverfront** will provide significant opportunity for passive recreational uses or environmental and heritage interpretation, while safeguarding and enriching the right of the public to access the riverfront. The **Central Riverfront** shares many of the same characteristics of the South Riverfront District and will be an important transition area. The relatively undeveloped and unconstrained lands of the Central Riverfront District contrast with the heavy industrial nature of the North Riverfront District and the environmental constraints of the South Riverfront District. The Central Riverfront District is the most likely District

to experience development pressures over the coming decade. It will be critical that the Town leadership remain committed to the vision outlined in this LWRP and hold true to creating high-quality development that respects the natural environment and heritage for future generations.

For many in the community, the Town's riverfront areas represent the future, an opportunity to capitalize on existing strengths and opportunities, while charting a new course and achieving new heights. Others recognize these areas as special and unique to the region. This LWRP is the unifying element that will guide local decision makers and weave together these various expectations.

Bethlehem's "new" riverfront will strike a balance—ensuring above all that the Town's riverfront is an inviting place for people to unwind and enjoy civic activities, while also providing important new places and opportunities for innovative residential, commercial and professional activities. The Town of Bethlehem's Local Riverfront Revitalization Program conveys a strong and clear vision for the future of the Town's riverfront that is compelling and inspiring, imagining possibilities that at first thought may be inconceivable, but will be possible over time with a continued focus on the future. While this program seeks to propel the areas of Bethlehem's riverfront in new directions, it is also highly focused on achievable initiatives, which are based in reality yet flexible enough to respond to market conditions and unique opportunities. This LWRP also recognizes that Bethlehem is a community of peaceful, safe and desirable neighborhoods. The LWRP aims to improve the quality of life experienced by the residents. A firm commitment by municipal leadership will be necessary to achieve the vision outlined in this plan.

Preparation of the Bethlehem LWRP is taking place at a key time for the Town. The Town is currently in the process of developing plans for a potential arterial bypass that could connect to the riverfront. If this occurs, then appropriate redevelopment around the intersection at Route 144 will be a critical component of the continued success that Bethlehem is experiencing. This is a challenging opportunity for the Town to consider this area in the context of continued reinvestment in the community and riverfront areas. It is also a challenge to define how the proposed bypass can best fit into the broader context of community renewal and support the residents of the community. The challenge will be to establish high standards for what will become a highly valuable area and to ensure successful, quality redevelopment with the greatest positive impact for the community as a whole. It will be a delicate balancing act. This LWRP establishes the criteria by which future redevelopment should be evaluated.

While the Local Riverfront Revitalization Program recognizes a few specific sites as important to continuing to build and enhance the quality of life offered in Bethlehem (such as the Jobs Corps site and adjoining Town-Owned property, the Bohl Excavation site and the Baker Farm site), it also recognizes broader programs and projects that transcend individual sites. Bethlehem's Local Riverfront Revitalization Program builds on the community's rich cultural and economic diversity by embracing development principles that recognize the delicate, and often difficult, interaction among community, environment, and economic progress. To accomplish much of what is outlined in this Program, the leadership of Bethlehem must work to be certain that new growth and development

occur in a manner that is consistent with the vision set forth in this Program. In a society that is becoming increasingly mobile, the opportunities afforded by Bethlehem combined with its cultural and recreational amenities will become progressively more important.

Bethlehem has always been a special place, and continues to remain as a place that is faithful to its heritage. This is one of Bethlehem's greatest assets. The challenge will be to balance this authenticity with new ideas as new residents continue to move into the community. It is hoped that this Program will facilitate that dialog and guide appropriate investment in the community.

4.2 PROPOSED LAND USE BY DISTRICT

The future character of the riverfront as a whole will reflect the riverfront's unique identity of today. Bethlehem's Waterfront Revitalization Area (WRA) includes one of the nation's unique settings in the South Riverfront District. It encompasses the only stretch of the National Heritage estuary without railroad or commercial development on either side and akin to what Henry Hudson and his crewmembers likely saw when they arrived in 1609. The areas visible from the water will be maintained and preserved in essentially the present visual context, maintaining the natural shoreline to preserve views. New construction, redevelopment, and screening, such as fences and landscaping, should not reduce or eliminate vistas that connect people to the water and the land.

Based on existing land use patterns and environmental constraints, Bethlehem's riverfront areas have been divided into three (3) districts.

North Riverfront District

Over time the North Riverfront District will reemerge as a mixed-use commercial, professional, and high-density residential district, with marina facilities, facilitated by its zoning designations of Industrial (which allows marina facilities with a Special Use Permit and site plan review), Rural Light Industrial, and Rural (which allows a range of housing options with site plan review). Special attention will be given to the quality of architecture and design in the district. The transition of the district will involve long-term transition to bring positive change and could be subject to intervention, such as preparing the land for redevelopment, then land banking until there is a critical mass of property available for large-scale redevelopment.

Central Waterfront District

While the Central Riverfront District provides unique historical and ecological value, it will be an important transition area between the South Riverfront and North Riverfront Districts. The Central Riverfront District has large tracts of flat undeveloped lands without environmental constraints. The current character of the district will be maintained with its open, quiet, historic and bucolic feeling; new development will be sensitive to this and incorporate the existing character into its designs. Consequently, it will be important to pay close attention to the location and quality of development in this area as development pressures begin to emerge. Land uses will include a range of development opportunities from recreation and interpretative opportunities to residential and commercial

development that must be held to high quality design clearly reflecting the unique sense of place in the Central Riverfront District. Additionally, new development will take the form of Hamlet development, as defined in the 2005 Comprehensive Plan, and as delineated in the Rural Hamlet zoning designation in the northern section of the District. New development will be required to provide meaningful open space, bike and pedestrian connections and include expressions of the areas historical significance. The district's mixture of zoning districts, including Rural Hamlet, Rural Riverfront, Mixed Economic Development, and Rural Light Industrial will foster an equally diverse mix of uses and connections.

South Waterfront District

The South Riverfront District will remain bucolic and natural, as intended by its predominantly Rural Riverfront, Rural, and Residential A zoning designations; proposed land uses will focus on expressing the rich history in the Town and the region as well as the ecological value of the riverfront.

The space between these three districts will include appropriate transition areas that smoothly blend the waterfront into one complete experience and will be high quality and fiscally responsible. This means that future development will create and sustain an atmosphere of partnership between the public and private sectors. This partnership recognizes their joint roles in investing resources to stimulate economic growth and success. It also recognizes the need to protect and enhance valuable cultural and environmental resources that make the Town's riverfront areas unique. In general, all new development should be built in a way that smoothly integrates the natural and heritage elements of these riverfront areas.

An integrated bike and pedestrian network will link the ten miles of riverfront, in some places following the river's edge, and in others following existing roadways. These districts are illustrated on the proposed land use map presented on the page following *LWRP Framework*.

4.3 PROPOSED WATER USE

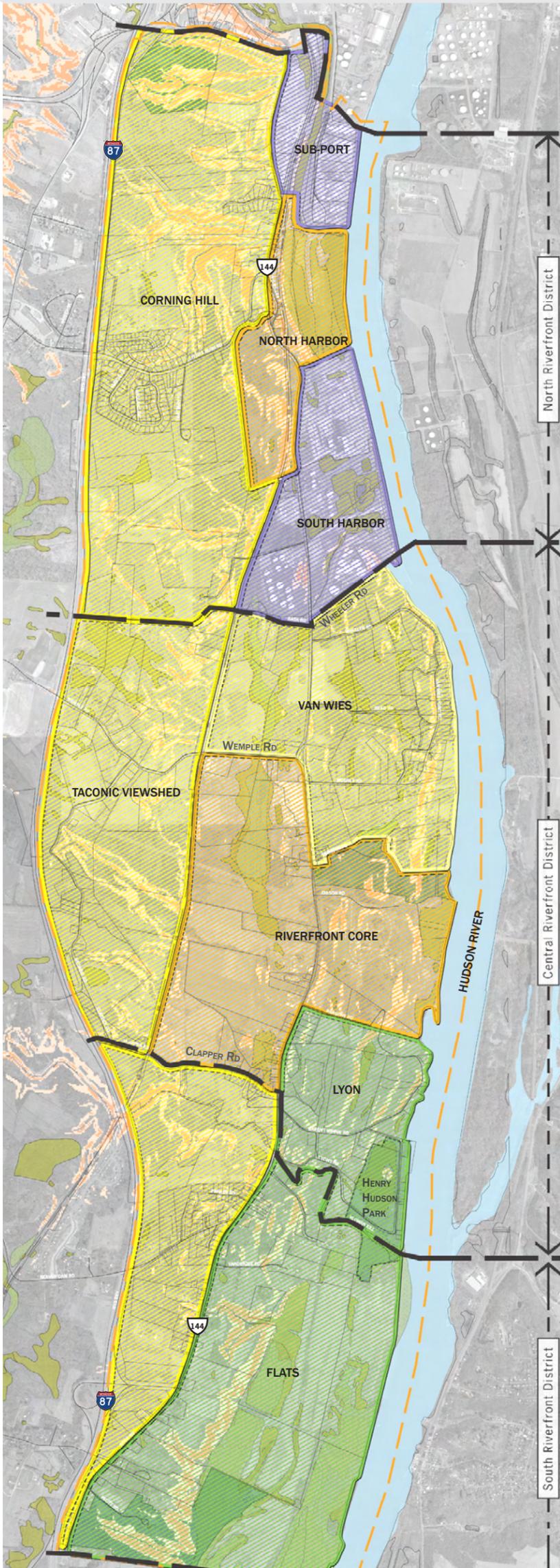
The eastern municipal boundary for the Town of Bethlehem is officially recognized as the centerline of the main channel of the Hudson River. Within the Town of Bethlehem, various water-dependent uses and the associated infrastructure are proposed to continue within the jurisdictional waters of the Town. In the North Riverfront District, these water uses include heavy industrial shipping, recreational boating, and water-based entertainment (such as the potential for tourist boats and visiting ships and naval vessels). The Central Riverfront District will maintain the natural edge, but will provide additional and enhanced existing docking areas as the Town continues to strive to attract recreational boaters using the Hudson River. The South Riverfront District will be maintained in its natural and historic form, unabated by development.

LWRP Framework

A Balanced Vision for Growth...

A SHARED VISION...

In the year 2020, Bethlehem's Riverfront Areas, as defined by the Town's Local Waterfront Revitalization Program, are a peaceful, safe and desirable destination that provide enhanced connectivity and access to the riverfront for all people to live, work, recreate, and experience history, culture and the environment in beautiful and inspiring spaces that respect our natural resources and heritage for future generations.



VALUE STATEMENTS...

SENSE OF PLACE

The riverfront areas will continue to be a special place in Bethlehem; they are the connection between town and river. They are places where residents will experience the beauty and diversity of Bethlehem. The riverfront areas will be developed within the context of Bethlehem's history and heritage. The quality of architecture and design elements will enhance and interpret this unique sense of place.

RECREATION, CONNECTIVITY & ACCESS

The riverfront areas will be available from both the land and the water. Multi-use recreational amenities will be accessible with safe, integrated connections that allow people to fully experience Bethlehem's riverfront areas. Diverse events and attractions will allow people of different ages and abilities to get a full riverfront experience.

HISTORY AND HERITAGE

The riverfront areas should be an important expression of the rich history of both the Town and the region. This history and heritage is important to interpret for future generations to understand the roots of the Capital Region. The heritage buildings, artifacts and historic traces of the riverfront areas express the richness of how the community was created and used. Opportunities for interpretation should be expressed in all new development that occurs within the riverfront areas.

STEWARDSHIP

The ecological value of the riverfront areas should be maintained and restored in all projects. Unique habitats should be protected. Opportunities to connect with and interpret the environment should be appropriately included in all projects. Unique and special scenic viewing areas should be respected and opportunity should be provided for all to experience these areas. Efforts should be made with our regional community partners to improve the environmental integrity of the Hudson River.

GROWTH AND DEVELOPMENT

The riverfront areas are places to live, work, and recreate with a wide diversity of uses and a range of visually interesting experiences. To reflect the diversity of its users, there should be a range of fiscally responsible built and "green" environments and opportunities appropriately designed and located for passive and active uses.

REGIONAL COORDINATION

As the Capital Region and Hudson River Watershed communities continue to grow and evolve, it will be important that all projects be evaluated within a regional context, especially the nearby waterfront communities of Troy, Albany, Rensselaer, East Greenbush, Castleton-On-Hudson, Coeymans and Schodack.

ACTION PLAN...

NORTH RIVERFRONT DISTRICT

- Participate in the State's BOA program
- Make transportation access improvements
- Manage, maintain and reinvest in public infrastructure
- Potential for a "Bethlehem Venture Center"

SUB-PORT

- Gateway improvements
- Strengthen industrial design policies
- Opportunity Area: Bohl Excavation Site

NORTH HARBOR

- Transform from traditional industrial uses to more modern, cleaner industrial uses, taking on a maritime character, with marine-based mixed-use investment.

SOUTH HARBOR

- Defined by its heavy industrial character on and off the riverfront, as these older industrial uses phase out, they will be replaced with modern industrial uses.

CORNING HILL

- Support expansion of the Bio-reserve
- New compact residential development
- Develop safe bike and ped connections
- Improvements at Rt. 32 and Rt. 9W

CENTRAL RIVERFRONT DISTRICT

- Provide opportunities for public access and use of the Riverfront

VAN WIES

- Maintain low density residential character
- Evaluate need for improved sewer and water

RIVERFRONT CORE

- Review land dedication standards
- Incentives for LEED construction
- Evaluate impacts of Selkirk Bypass
- Opportunity Area: Town-Owned property on Simmons Road

LYON

- Expand land conservation initiatives
- Henry Hudson Park improvements
- Odor control at WWTP
- Trail connection between Henry Hudson Park and Simmons Road property
- Consider scenic overlay district

TACONIC VIEWSHED

- Preserve and improve viewing opportunities of the Taconic Mountains

SOUTH RIVERFRONT DISTRICT

- Defined by its peacefulness and diversity, the district is a unique place that provides an important expression of the rich history ... as well as the ecological value of the riverfront. The district is recognized for its long-term green space and cultural and heritage interpretation opportunities.

FLATS

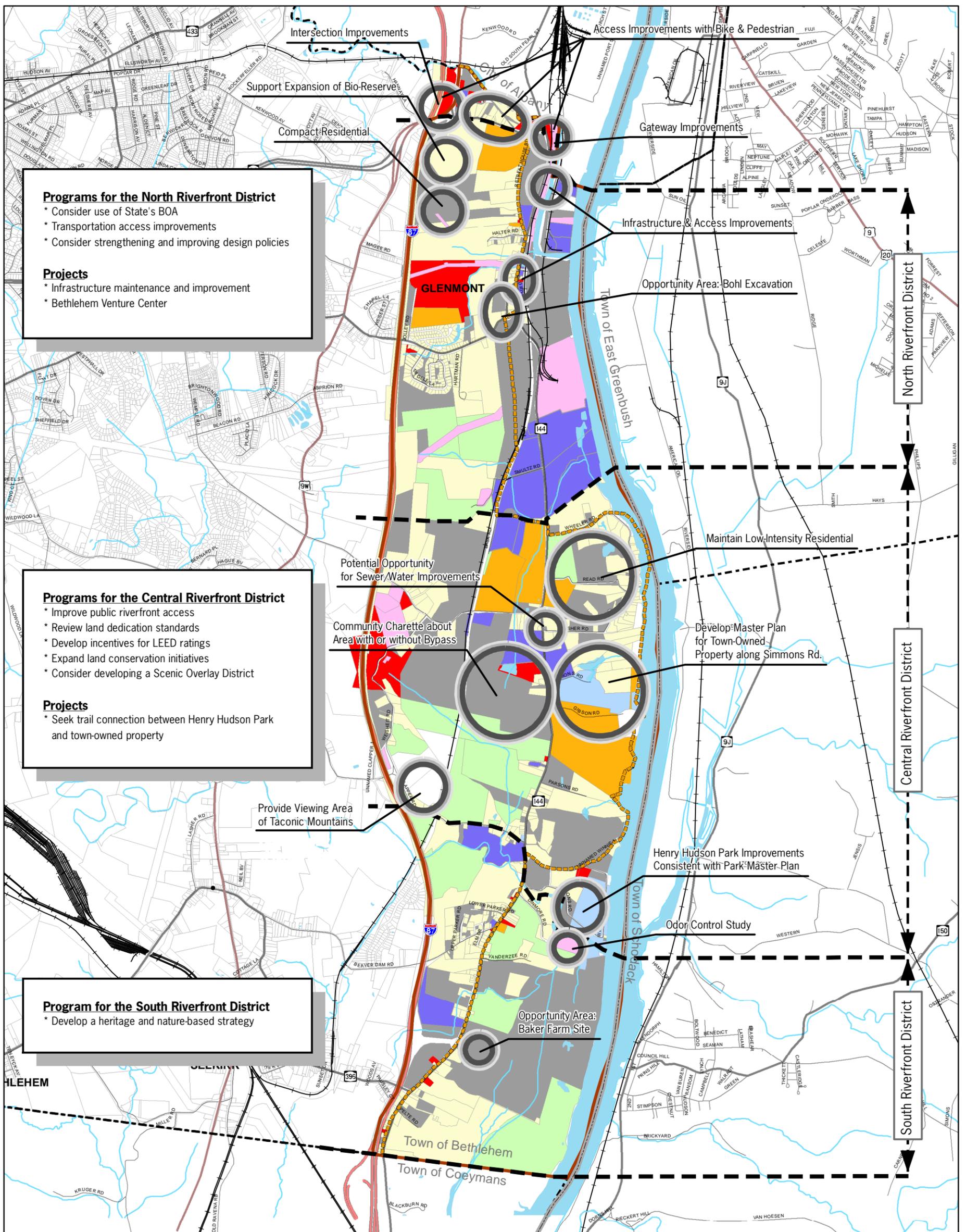
- Develop heritage and nature-based strategy
- Opportunity Area: Baker Farm site

CORRIDOR-WIDE

- Assess the Route 144 corridor
- Acquisitions and conservation easements
- Trail network throughout corridor
- Coordinate with regional communities
- Riverfront gateway improvements



***LWRP Proposed
Land & Water Uses Map***



PROPOSED LAND & WATER USES

Local Waterfront Revitalization Program
August 2008

- KEY**
- COASTAL BOUNDARY
 - TOWN BOUNDARY
 - RIVER/STREAM
 - LAND USE
 - NO DATA
 - AGRICULTURAL
 - COMMERCIAL
 - COMMUNITY SERVICES
 - FORESTED/CONSERVATION
 - INDUSTRIAL
 - PUBLIC SERVICES
 - RECREATION & ENTERTAINMENT
 - RESIDENTIAL
 - VACANT

- COUNTY BOUNDARY
- WRA BOUNDARY
- WATER



PROJECT # 2006 - 06127.10P
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This map is computer generated using data acquired by Saratoga Associates from various sources and is intended only for reference, conceptual planning and presentation purposes. This map is not intended for and should not be used to establish boundaries, property lines, location of objects or to provide any other information typically needed for construction or any other purpose when engineered plans or land surveys are required.

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SARATOGA ASSOCIATES

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NEW YORK CITY > SARATOGA SPRINGS



TOWN OF BETHLEHEM

4.4 PROPOSED PROGRAMS & PROJECTS

For the ease of the organizing and locating the following programs and projects, the LWRP framework has have been grouped into districts based on the existing land use patterns, dividing the riverfront into three (3) distinct areas, each with sub-areas. These include the following areas and sub-areas:

1. North Riverfront

- a. Sub-Port
- b. North Harbor
- c. South Harbor
- d. Corning Hill

2. Central Riverfront

- a. Van Wies point
- b. Riverfront Core
- c. Lyon
- d. Taconic Viewshed

3. South Riverfront

- a. Flats



When reviewing each of these recommendations it is important to keep in mind that the key component of the Program is to achieve balance within the community and the region. The Comprehensive Plan recognized balance as the need to find the equilibrium between urban, suburban and rural perspectives; the need and desire for economic growth, for tax base expansion and diversification, and the short-term and long-term health, safety and welfare of the community. In the context of the LWRP, we recognize balance as the need and desire for economic growth and the stewardship of finite land and cultural and environmental resources within the river influenced areas.



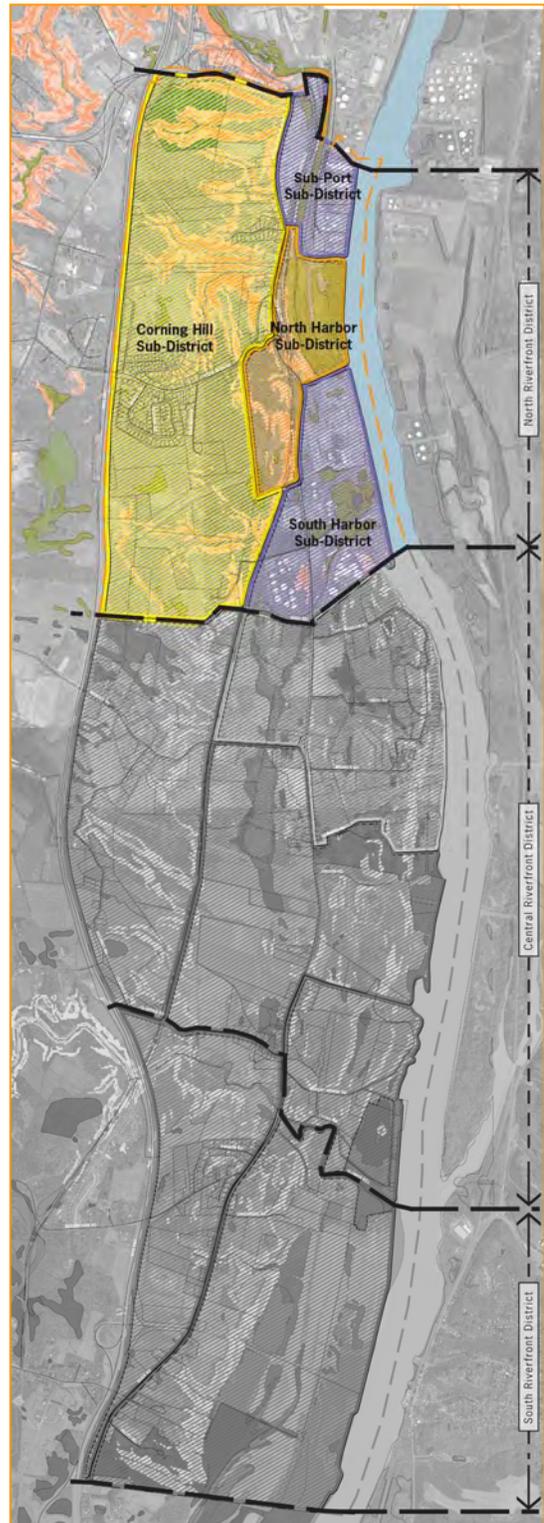
North Riverfront District

The North Riverfront District has a strong connection to the City of Albany via its industrial, port-related activities. Redevelopment of this district will involve a series of economic diversification projects over an extended period of time. First, a more complete strategy will be developed to incrementally rebuild the area and properties will be identified, as catalysts for redevelopment. Investments in infrastructure, such as sewer, water and access will take priority in the short-term. As changes take place over time, some properties will transition from heavy industrial uses to more modern commercial and light industrial uses. The vision for these same properties, especially projects east of the Route 144 corridor, is to take on a character reflected in a stronger sense of urban and industrial form being developed through a higher density of buildings than on the rest of the riverfront. As opportunities develop and environmentally challenged properties are reclaimed, the character of the area will integrate the working waterfront with new mixed-use redevelopment. West of the Route 144 corridor, the character of the area will generally be defined by its natural features, with educational and interpretation activities and new residential development further west and opportunities for light industrial development closer to the Route 144 corridor. This long-term revitalization of the North Riverfront District must be approached systematically. It should include a series of incremental additions that will ultimately result in a renewed North Riverfront and not compromise water or air quality odors in the region.

North Riverfront District-wide Programs

Consider use of the State's Brownfield Opportunity Area Program

The Brownfield Opportunity Areas (BOA) Program is designed to assist communities foster redevelopment and return dormant and blighted land into productive and catalytic areas while restoring environmental quality. This program provides municipalities and community-based



organizations with resources to address local brownfields providing area-wide brownfield redevelopment planning, access to expert environmental and economic analysis, and environmental site assessment for strategic redevelopment parcels. The BOA program is broadly described below. For more detailed information, please visit the State's BOS website site at, http://www.nyswaterfronts.com/grantopps_BOA.asp.

Participation in the State's BOA program should be considered in the North Riverfront District to determine the highest and best use for some key properties in the District. The BOA program takes a holistic approach to brownfields redevelopment in that it does not examine an individual site, but instead identifies a specific district for redevelopment. After the study area is defined and key properties are identified as potential brownfields through Step 1, Step 2 in the process includes a full assessment of the area including a market analysis to give direction regarding the types of redevelopment opportunities that exist in the study area. Finally, among the activities in Step 3, the State provides funding to characterize the potential contaminants on those sites identified as brownfields. This process, and the information developed, is a good starting point to help inform the Town with both the transportation access and infrastructure improvements outlined below.

North Riverfront District-wide Projects

Transportation access improvements

As a whole, the North Riverfront District benefits from its proximity to the city of Albany, the Albany Port Authority and the NYS Thruway. One of the key issues being faced by many of the sites in the North Riverfront District is the need for improved accessibility, particularly those on the east side of State Route 144. For any redevelopment to be successful in this area these issues relating to accessibility from State Route 144 will need to be addressed.

State Route 144 in Bethlehem experiences significant impacts due to high traffic volumes, visual character and noise from regional automobile and truck traffic. Improvements are currently being evaluated for much of the Route 9W Corridor, but the study area stops just short of this area at the intersection with Route 32. Access to the North Riverfront District is generally from Albany and the New York State Thruway (via Corning Hill Road). A potential access improvement may include capacity improvements along Corning Hill Road to bring vehicles more efficiently and directly from the Thruway at Exit 23 via US Route 9. Access will also need to be addressed to the sites along the river. Overall transportation access improvements to the North Riverfront Area will lead to improved economic development potential and support the intent of directing new growth and development to already developed areas. In order to best understand how and where these improvements should be made, the Town should develop an access improvement plan for the North Riverfront District. Special attention should be made to provide improved access to the properties east of the Route 144 corridor.

Manage, maintain and reinvest in public infrastructure

Managing, maintaining and reinvesting in the sewer and water services provided in the North Riverfront District will be an important ingredient to encouraging private sector re-investment in this district. Investing in sewer and water infrastructure has the power to transform the future of the riverfront as a whole. Further, investments in the sewer and water systems in the North Riverfront District will be critical in the implementation of the LWRP to support redevelopment in the district, allowing for the type of new development that is compatible here, and help to ensure that the proper type of development patterns are fostered in the Central and South Riverfront Districts by encouraging redevelopment of the North Riverfront District. The Town must develop a program that addresses the infrastructure needs of the district, and prioritizes needed investments. Some areas need maintenance, while others need new public sewer and water systems. Investments made in the sewer and water network in this district should be coordinated with any transportation access improvements, as identified in the access improvement plan recommended above. Public infrastructure is the backbone of economic growth and private sector investment for the North Riverfront District.

Consider redevelopment of properties along the Riverfront as the Bethlehem Venture Center

Conceptually located along the Hudson River, the Bethlehem Venture Center would have a significant effect on both the Town and the regional economic foundation. The Bethlehem Venture Center would provide an opportunity to bring enhanced learning, social interaction, and trade and industry opportunity into an area that is currently underutilized with its premier location on the Hudson River. It is recognized that the area needs improved vehicle access, but it does have good river and rail connections. While the Venture Center has not been



The **objective** of the Bethlehem Venture Center would be to create an active, **vibrant campus environment** that would take advantage of its setting on the Hudson River.

specifically located in the North Riverfront District, it would be a good fit for properties in the North Harbor Sub-District and benefit not only the residents of the Town, but also the region as a whole. The reuse of underutilized and vacant areas would help Bethlehem renew the image of the area while providing a wide range of creative and educational enriching programs to community and regional residents. The Venture Center could feature uses related to emerging environmentally based technologies and fully integrating public post-secondary educational facilities with private sector research and development functions. The Center should be committed to fostering links between community residents and industry, and provide opportunity to gain the skills necessary to contribute to the long-term success of the region. The Venture Center would help attract new residents and visitors while facilitating a strengthened connection to the riverfront and the emerging Tech Valley initiative, which promotes the new economy, a sector driven by the service and information industry.

Potential uses in the Bethlehem Venture Center could include:

- > Research and development (perhaps environmental and ecologically-based and/or energy related)

- > Business incubation center
- > College outreach
- > Restoration trades school
- > Boat building/handling school



The development character of the facility should engender a campus-like setting with landscaped paths and sidewalks connecting the various buildings. Buildings would be built new to give distinctiveness to the Bethlehem Venture Center and add to the visual integrity of the area. Zoning revisions may be necessary that support this type of redevelopment and should be addressed if the Town pursues participation in the State’s Brownfield Opportunity Area program.

Sub-Port

The Sub-Port District provides the greatest opportunity for marine-based industrial activities that support port activities within the Albany-Rensselaer Port District. Port-related activities will be the primary activities within the Sub-Port District.

Sub-Port Projects

Gateway Improvements

Gateways play an important role in forming first impressions and welcoming visitors and residents alike. Both the form and the character of a gateway can influence the overall experience of a particular area. When arriving into Bethlehem along the Route 144 corridor, the land uses are industrial in nature. Nonetheless, some design interventions can be made to modify the impact of the industrial nature of this gateway and help to foster redevelopment of some key sites.



Gateways are important in forming impressions about what the traveler will experience; they can also be effective traffic calming areas and provide for safe pedestrian crossings.

A line of trees might be introduced along the road. In some key areas a double row of evergreen trees could be introduced along the roadway with evergreen shrubs to screen the industrial areas from view. Shrubbery should be set back from the curb a sufficient distance to retain a path along the roadside, possibly a future sidewalk or dedicated bike lane.

Consider improving industrial design policies with performance standards

The Town’s current zoning code includes design guidelines for both Heavy Industrial and Rural Light Industrial Zoning Districts located in the Sub-Port District. However, consideration should be given to include additional requirements that enhance performance of these sites. For instance, green building technologies should be considered that encourage environmentally sustainable building design. This could mean the use of energy efficient materials, solar energy, and structural and

mechanical components that save utility costs over the life of the structure and have minimum impact on the environment. These performance standards would be consistent with the overall vision for the Riverfront to develop spaces that respect our natural resources and heritage for future generations.

Opportunity Area: Bohl Excavation Site

The Bohl Excavation site is generally located between Retreat House Road and the west side of Route 144 covering approximately 37 acres. Over time, the area could become a powerful focal point that enhances further redevelopment in the North Riverfront District around which new mixed-use development could be based. In the short-term, the site should be put to a higher use with ventures that will make the site more active and appealing. This could involve commercial operations that supply the building industry, along with retail space for the general public, or could become a low-intensity site for manufacturing, processing, assembly and distribution uses. Longer-term, the site could be redeveloped for those activities that offer the greatest positive community impact by reinforcing connections to the waterfront as a special place in the Town and by strengthening its relationship with the riverfront. Redevelopment of the site could emphasize the need to provide an enhanced environment by building a critical mass of activities that strengthens the riverfront area as a destination for residents and visitors, provides new professional employment opportunities, offers retail establishments and provides new housing prospects. Redevelopment of the Bohl Excavation site could also provide the opportunity for further redevelopment east of Route 144, connecting with the Hudson River. The Town should consider working with the property owner to examine the potential for redevelopment and then determine the public sector improvements necessary for redevelopment. The State's Brownfield Opportunity Area Program may be a good option to engage in this examination in coordination with the property owner.

To best understand how the site can contribute to the short-term and long-term health, safety and welfare of the community, while helping to change perceptions of the area, a more detailed study of the site should be developed.

North Harbor

The North Harbor District will transform from traditional industrial uses to more modern, cleaner industrial uses. The district will take on a maritime character, with marine-based mixed-use investment, including boat building and repair operations, residential, commercial, entertainment, and professional uses. In the future, there will be opportunities for recreational motorboats to access and moor at this area. Beacon Harbor, a current project under review, embodies many of these principles.

South Harbor

Its heavy industrial character on and off the riverfront defines the South Harbor District. The area abuts the Van Wies Point neighborhood, one of Bethlehem's unique neighborhoods. However, with existing vegetation and the natural slopes of the land, this neighborhood is fairly well buffered from the industrial activities of the South Harbor District. In the event that these older industrial uses are phased out, these areas will be investigated for environmental contamination and replaced with

modern industrial uses. New uses will need to be evaluated against the Value Statements made in this Plan.

Corning Hill

The Corning Hill District is an important gateway to the Town from the NYS Thruway and the City of Albany. Much of the development in the district is defined by the steep sloping nature of the topography. The district also includes a unique ecological interpretation opportunity on Old Route 9W with the Bio-Reserve with the potential for expansion. Opportunities exist for compact residential development to be woven into various pockets within the Corning Hill Sub-District.

Corning Hill Projects

Support potential expansion of the Bio-Reserve

The Bio-Reserve currently occupies sixty-eight acres along Old Route 9W. A natural haven for wildlife and educational and scientific opportunities are being created and maintained on the reserve. The property's character is typical of the Corning Hill Sub-District with steep slopes and ravines. Expansion of the reserve will aid in maintaining the natural features of the area and providing opportunities for education and interpretation. The Town should work with the property owner to support this initiative to expand the programs offered as well as the lands included in the Bio-Reserve.

Examine potential for new compact residential development

Within the Corning Hill District buildable most land has reached optimum building density. However, there is some opportunity for continued residential growth in a few small pockets in the district. Residential development should act sensitively to the existing natural areas and involve environmentally and culturally friendly design techniques including a public center, compact development, and walkability. Development projects ought to be connected and include mixed housing types.



Example of compact, walkable, residential development.

Develop a Transportation Access Plan that provides safe bike and pedestrian connections to the waterfront

Pedestrian connections should exist between developments as well as to other areas within the WRA. Specifically, safe pedestrian connections are necessary in the Corning Hill District to move residents from the neighborhoods to the waterfront. These connections should be considered as part of the capacity improvements proposed below.

Make intersection improvements at Rt. 32 and Rt. 9W and improve capacity along Corning Hill Rd.

It has been clearly noted that the north Riverfront District has a number of accessibility issues that need to be addressed in order for it to reach its full economic potential. Route 9W provides the North

Riverfront District with an important connection to the New York State Thruway and I-787. However, when Route 9W intersects with Route 32 the connection becomes inefficient. As part of the proposed transportation access plan, the Town should consider how this intersection could be improved to provide improved access to Route 144. Further, as part of this analysis, it will be necessary to understand the capacity improvements necessary along Route 32 to facilitate a clear and efficient connection to Route 9W. This analysis should also consider how bike and pedestrian connections could be incorporated into any redesign of Corning Hill Road.

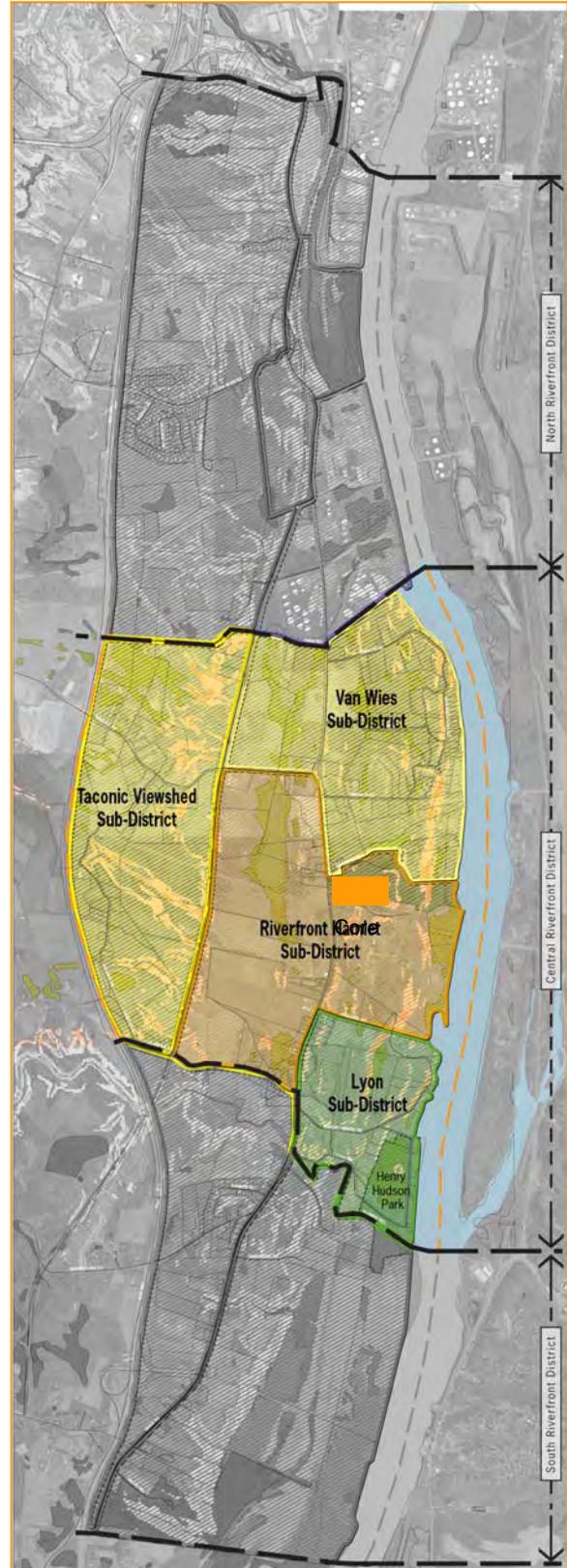
Central Riverfront District

The Central Riverfront has a number of defining characteristics and is an important transition between the North and South Districts. The district can be viewed as the fulcrum providing balance within the Riverfront Areas, where character transitions from higher density, industrial and maritime activities to open, quiet, and bucolic spaces. The district includes several opportunities to connect with and interpret the environment as well as unique and special scenic viewing areas. As noted below, the district includes a range of development opportunities that must be held to high quality design that clearly reflect the unique sense of place of the Central Riverfront District.

Central Riverfront District-wide Projects

Provide opportunities for public access and use of the Riverfront

The Town of Bethlehem has ten miles of Riverfront with only one public access point, Henry Hudson Park. The Value Statements for this LWRP call for multi-use recreational amenities to be accessible with safe, integrated connections that allow people to fully experience Bethlehem's riverfront areas. The Central Riverfront District provides a good opportunity to begin to establish a waterfront trail because it includes both the Henry Hudson Park and the Town-owned property along Simmons Road. This proposed access trail complements the South Riverfront District, where passive recreational and interpretation opportunities are being developed. The natural setting of the area should be preserved as much as possible. Amenities such as benches, interpretive signage, and designated fishing access points should be provided. In an effort to create community-wide connectivity, the Town should work with a professional engineering and design firm to determine an appropriate route for a trail network along the riverfront, including potential



locations and types of amenities. Cost estimates should be provided to give an order of magnitude and the types of issues that will likely emerge as a master trail plan is implemented.

Van Wies

The Van Wies Point District is a well-established, unique neighborhood with distinctive views of the Hudson River. Natural features buffer the district from the higher intensity industrial uses of the North Riverfront District. Maintaining the interface between the North Riverfront District with these natural buffers is essential to the future integrity of Van Weis Point neighborhood. Future land uses within the district will support the continued success of this neighborhood.

Van Wies Projects

Maintain low intensity residential character of the district while maintaining buffers

The Van Wies district is defined by its stable, low intensity, peaceful residences. These land uses should be continued. Future redevelopment at either end of this district should include the appropriate buffers to maintain this neighborhood as one of Bethlehem's unique neighborhoods. The potential for a trail network should be examined as part of the proposed riverfront trail network. Trail connections should be sought to connect the neighborhood with redevelopment of the Town-owned property along Simmons Road.

Evaluate the need for improved sewer and water connections

While developing this LWRP, it was noted there might be the need to provide improved sewer and water connections to particular areas. Currently, only a small area around the intersection of Route 144 and Mosher Road provides water connections. Further infrastructure upgrades should be studied within the Van Wies area.

Riverfront Core

The Riverfront Core provides an important expression of the region's rich history and is an important transition between the North and South Riverfront Districts. Over the long-term, any development within the Riverfront Core will provide for environmentally sensitive development meeting high standards for environmentally responsible, sustainable development. The LWRP further qualifies the Bethlehem Comprehensive Plan by calling for the provision of long-term green space and cultural and heritage interpretation opportunities in the Riverfront Core. The Riverfront Core will also provide an opportunity for safe and easy access to the riverfront for a range of users. Combined with the Job Corps site, the adjacent Town-owned property on Simmons Road connects the community with the Hudson River, and thus



Over the long-term, any development within the Riverfront Core will provide for environmentally sensitive development and an opportunity for safe and easy access to the riverfront for a range of users.

should be developed with a traditional and civic character, creating a desirable destination. Any new construction should be consistent with the Comprehensive Plan's goal for Hamlet areas to encourage compact, mixed-use commercial and residential centers on the west side of the Route 144 corridor. Future development in the district should provide for interpretation and protection of the cultural and environmental aspects of the area, while providing for the protection of open space. Further, development needs to be consistent with Smart Growth and LEED (Leadership in Energy and Environmental Design) building and design principles and relate activity to the open space in the area and connections to the waterfront. The Riverfront Core can be seen as a central hub along Bethlehem's riverfront. The Riverfront Core is *not intended* to stimulate growth in the area, but rather to be a proactive, managed approach to future development associated with continued growth in the region. Any long-term, future development will be consistent with the desire to maintain the open, rural character and integrity of the area. As the Riverfront Core evolves, it will aim to ensure that open space and heritage interpretation opportunities are made available to current and future residents in a fiscally responsible manner and under consistent standards. At the time of development, public open space connections should be planned for or in place.

Riverfront Core Programs

What if the Selkirk Bypass is built?

Construction of the Selkirk Bypass is a long-term project (10 – 15 years from now) that is difficult to address with this LWRP. However, it is recognized that construction of the Bypass will have impacts on the way the Route 144 corridor functions, particularly on the land uses where it intersects with Route 144. It will likely result in new residential and commercial development. Proactively preparing for this new development will be an important step for the Town to take. This LWRP is a statement of intent, which recommends steps toward action. The vision, policies and recommendations outlined here are an important framework to evaluate future projects and programs against. Further, based on current zoning for the Mixed Economic Development District, new development greater than 5 acres proposed in this area will be required to develop a development master plan, which should include phased development, that must be approved by the Town Board. It will be critical that Town leadership remain committed to the vision and spirit of this LWRP if the Selkirk Bypass is constructed.

To best understand what needs to be accomplished, the Town should sponsor a “Community Charrette” when it is fully confirmed that the Bypass will be constructed. The Charrette will lead to a coordinated vision and inform the Town leaders the actions necessary to provide for the type of development to prepare for as well as the character of the development.

What has been made clear in both the 2005 Comprehensive Plan and further supported by this LWRP, new development should be consistent with the principles outlined for hamlet development in the Comprehensive Plan. This LWRP further pushes for environmental and cultural sensitivity elements to be considered in any new development occurring in the Central Riverfront District.

What if the Selkirk Bypass is not built?

The area in which the Selkirk Bypass is being proposed holds significant development potential with or without construction of the Bypass. This same land also provides an important scenic amenity with its vast pastoral, open space characteristics. This LWRP, just as the Comprehensive Plan, seeks to achieve a balance between the need and desire for economic growth and the stewardship of finite land and environmental resources. The area is currently zoned MED Mixed Economic Development, which requires significant Planning Board review and Town Board approval of proposed projects. For any projects proposed in the area, the highest level of visual and architectural character should be aspired to. To achieve this, design standards should be developed for the area and/or a scenic overlay district should be established for the area. All projects should be evaluated against the Vision Statement and Value Statements made in this LWRP. The 2005 Comprehensive Plan recommends that new development should be consistent with the principles outlined for hamlet development and this LWRP further calls for environmental and cultural sensitivity elements to be considered in any new development occurring in the Central Riverfront District.

As above, if the decision is made to *not build* the Bypass, then the Town should sponsor a “Community Charrette” to develop a coordinated vision for this area and determine the most appropriate redevelopment principles that are consistent with both the Comprehensive Plan and this LWRP.

Riverfront Core Projects

Review land dedication standards as part of the Open Space Plan currently under development

To achieve this vision for an integration of green space, cultural interpretation and new development, the Town needs to review and amend its land dedication standards to address the need for the protection of and connections to a coordinated open space network plan for the Riverfront Core area. The Town may also consider developing a dedicated open space and recreation fund for projects proposed within the Riverfront Core area, using development to achieve some of the resource protection goals to be achieved with this Program.

Develop incentives for new buildings to meet LEED ratings

As part of this LWRP’s holistic approach to respect natural resources for future generations, the Town should engage the private sector by encouraging new construction to achieve LEED (Leadership in Energy and Environmental Design) ratings through various incentives. Many municipalities around the country are already doing this by providing tax breaks, density bonuses, grants, expedited permitting, and reduced fees and waivers for projects achieving LEED certification. These incentives would be consistent with overall vision of the LWRP and help to foster the type of development that has the lowest impact on the environment, both in construction and in operating costs.

Opportunity Area: Develop Master Plan for the Town-Owned Property along Simmons Road

The Town-owned property should be redeveloped as a community civic gathering and educational outreach space. A master plan should be developed that includes some or the entire Jobs Corps site. The Jobs Corps Site could become more public over time. Current security guidelines prohibit public access, but as time passes the site will likely become available for redevelopment and should be considered as part of a larger master plan for the town-owned property along Simmons Road.

The area will be a destination in its own right to complement the proposed Riverfront Core. The area should open out from the Riverfront Core and complement the waterfront experience. Within the recreational context, the design should develop the natural, arts, culture and heritage themes of the waterfront as a whole. The master plan for the Town-owned property and Jobs Corps site could be modeled after the Crossing's of Colonie Park. The master plan should explore opportunities for artist space and related cultural activities, creating an active, "living culture" open to the public to encourage participation by all people visiting and enjoying the riverfront. Potential cultural activities include environmental interpretation of the wetlands and wooded areas, weaving, decorative arts, building construction, carving and performing arts. Emphasis should be put on the pedestrian and bicyclist with multi-use trails connecting all areas and the Riverfront. The area should also have places suitable for informal gatherings as well as formal public events for both large and small groups. As noted earlier, Bethlehem's riverfront is one of the nation's unique settings, akin to what Henry Hudson and his crewmembers likely saw when they arrived in 1609. To the extent possible, the areas visible from the water will be maintained and preserved in essentially unchanged form and maintain the present visual environment. A community-wide charrette should be held to better understand the programming potential for the area.

Lyon

The Lyon District provides the only existing public access to the riverfront at Henry Hudson Park. As part of this LWRP a Master Plan was created for redevelopment of Henry Hudson Park. Large tracts of relatively undeveloped, natural lands define the Lyon District. While the district is dominated by private property ownership, its "natural" integrity provides an opportunity for expanded conservation initiatives that would complement the South Riverfront District.

Lyon District Programs

Expand land conservation initiatives

The Lyon District provides an important transition to the South Riverfront District. Much of the property here has high natural and ecological value, and many of today's landowners in the district recognize this value. The Town should coordinate with landowners and conservation based organizations, such as the Conservation Advisory Council, Nature Conservancy, Mohawk Hudson Conservancy, and Scenic Hudson, to develop a land conservation plan for the area, a guide for future use and long-term management. The land conservation could contain recommended actions that preserve and enhance a range of beneficial public values, including outdoor recreation, sustainable forestry, agricultural uses, habitat protection, open space, and historic and traditional values.

Consider developing a scenic overlay district as part of the Open Space Plan currently under development

The Lyon District provides an important transition from the Central Riverfront District to the South Riverfront District. The district also includes some important community assets like Henry Hudson Park and the Vloman Kill. Its large residential lots, creating a feeling of being far from an urban environment, define the district. Future linkages to adjoining landscapes, specifically the South Riverfront District, are an essential component of the Lyon District.

Identifying the aesthetic value of scenic resources is a subjective process. Certain areas are distinguished because of special geologic formations, pristine landscapes, agricultural settings, natural resources, and historic structures. Scenic roads are segments of roadway that contain natural, historic, or cultural resources in proximity or contain an area of concentrated scenic vistas. Scenic vistas are points along a roadway that have sweeping views of the landscape. Scenic resources may be depleted or overshadowed by inappropriate development activities.

To emphasize the importance of preserving Bethlehem's inherent scenic qualities in the Lyon District, the Town should consider establishing scenic overlay provisions to encourage compatible land uses that complement the existing rural character and provide protection of scenic vistas from roadways, gateways into the area, and overall scenic character of the district. The overlay district concept does not affect the underlying use, density, or area and dimensional requirements, nor is it intended to reduce the development opportunity within the area; however, applicants must provide a scenic resource map, visual analysis, and satisfy performance standards when proposing development within a scenic overlay district.

A scenic overlay district could be established as a tool to review proposals within a defined area and can foster development patterns consistent with the long-term vision for the Lyon District as an important link to the South Riverfront District.

Lyon District Projects

Make Henry Hudson Park improvements in accordance with the Master Plan

Covering approximately 51 acres, Henry Hudson Park provides the only primary public access to the Hudson River in the Town of Bethlehem. Because of the quality of the park, it draws residents not only from the Town, but also from the nearby communities to fish, launch boats, picnic, recreate and simply enjoy the view of the River. Open spaces, woodlands, and park amenities are present. The park contains a softball field, a picnic pavilion, a lookout gazebo, and volleyball courts. The public boat launch draws crowds for the Striper season, mid-April to July. The Quadricentennial of Henry Hudson and Samuel de Champlain's voyage up the Hudson River will bring celebrations and a memorial to Henry Hudson Park in 2009.

People of Bethlehem wish to maintain the quiet and natural character of the park while improving upon the existing park amenities. Access to the woodland, the river, the Vloman Kill, and safe access

along the roadways is needed. Future connections to other Bethlehem parks and to the Greenway Trails System are planned. Henry Hudson Park has the potential of becoming a great public space with expansive views of the Hudson River and recreational and educational opportunities in its natural and historic areas. A Master Plan for the park was developed as part of this LWRP and is provided in this Section IV of the LWRP. The Master Plan includes both a short-term phase and a long-term phase. The short-term phase addresses more immediate needs of the park and responds to current funding sources already in place for various improvements. The long-term phase is more involved and will require significant investments into the park. It is expected that the long-term phase could take up to twenty years to be fully realized. This long-term plan builds momentum through smaller, incremental improvements. Each investment made will add to the over all vision for the long-term implementation of the concept outlined here.

Perform an Odor Control Study at the Wastewater Treatment Plant and Implement Recommendations

The recommendations made for Henry Hudson Park reinforce the park as a significant public gathering space on the Hudson River. However, it has been repeatedly noted that the Wastewater Treatment Plant located immediately south of the park detracts from the experience at the park, particularly on weekends and holidays; offensive odor emissions associated with the treatment process is causing a nuisance to the enjoyment of the park. The purpose of the Odor Mitigation Study is to quantify the odorous compounds associated with the treatment system, determine the significant odor source locations in the treatment system and to identify significant parameters which affect both the formation and release of odorants/odors from the system and provide useful baseline information for the selection of appropriate treatment technologies for odor reduction. Once the odors are fully characterized, an odor mitigation plan should be developed and implemented. One short-term solution might be to operate trucks for extended periods, particularly on weekends and holidays, until the appropriate mitigation measures are put in place.

Develop trail connection between Henry Hudson Park and the Town-Owned property on Simmons Rd.

Henry Hudson Park is currently the only notable public access point to the Hudson River. However, this LWRP also recommends that the town explore new opportunities for redevelopment at the Town-owned property along Simmons Road. Establishing a trail connection between these two parks will build upon and enhance the waterfront and the success of both areas, creating a larger, more cohesive system of opens spaces and riverfront access. Specifically, this trail connection could offer nearly three miles of new parkland, river views, wildlife habitat, nature-based recreation and educational programs. Further connections should be explored to the South Riverfront District.

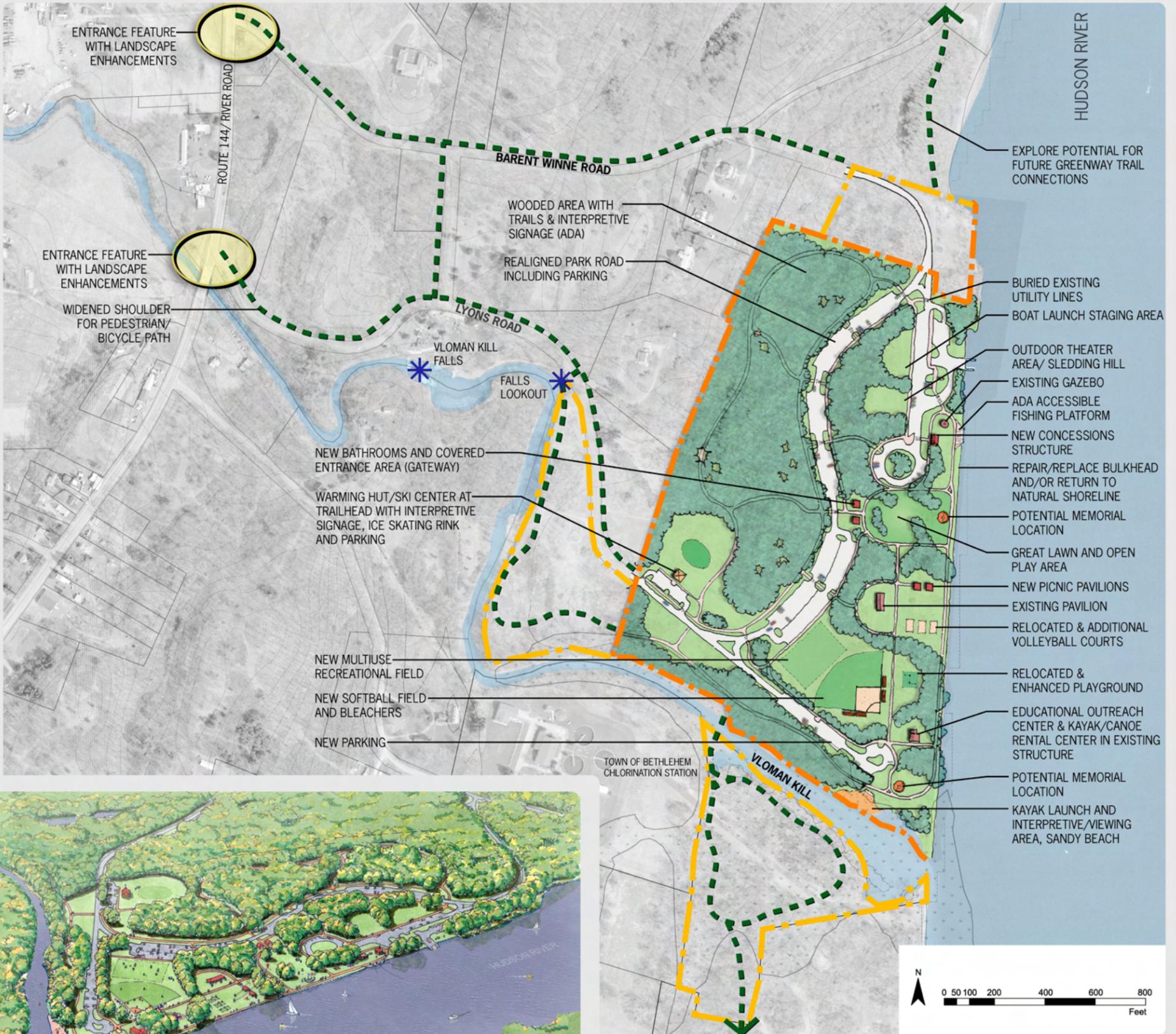
**Henry Hudson Park
Master Plan**

BETHLEHEM

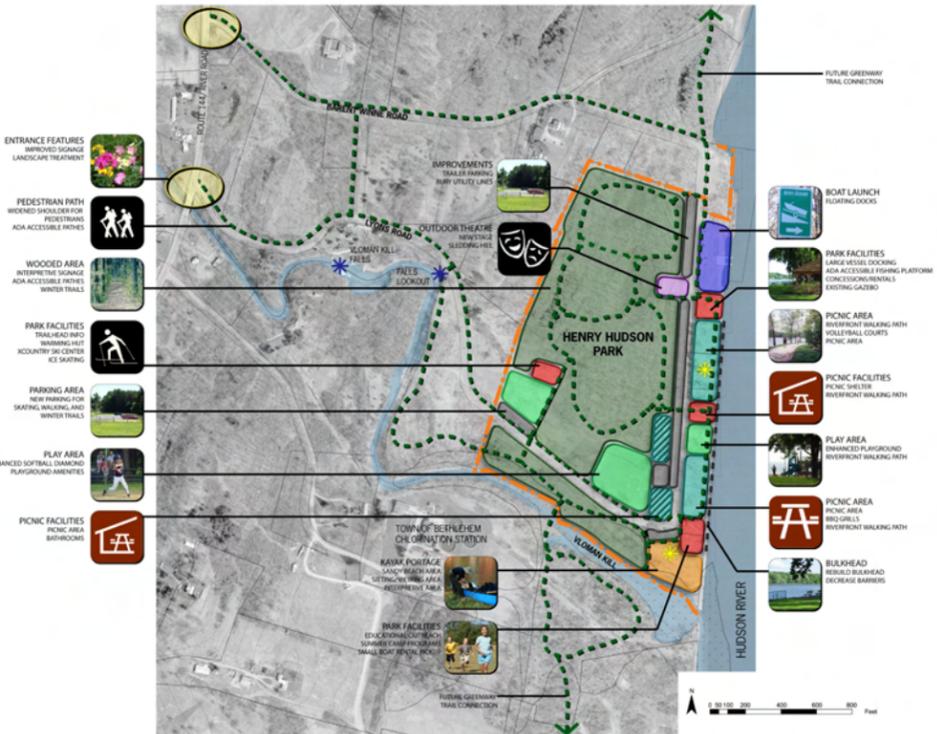
LOCAL WATERFRONT REVITALIZATION PROGRAM

OCTOBER 2007

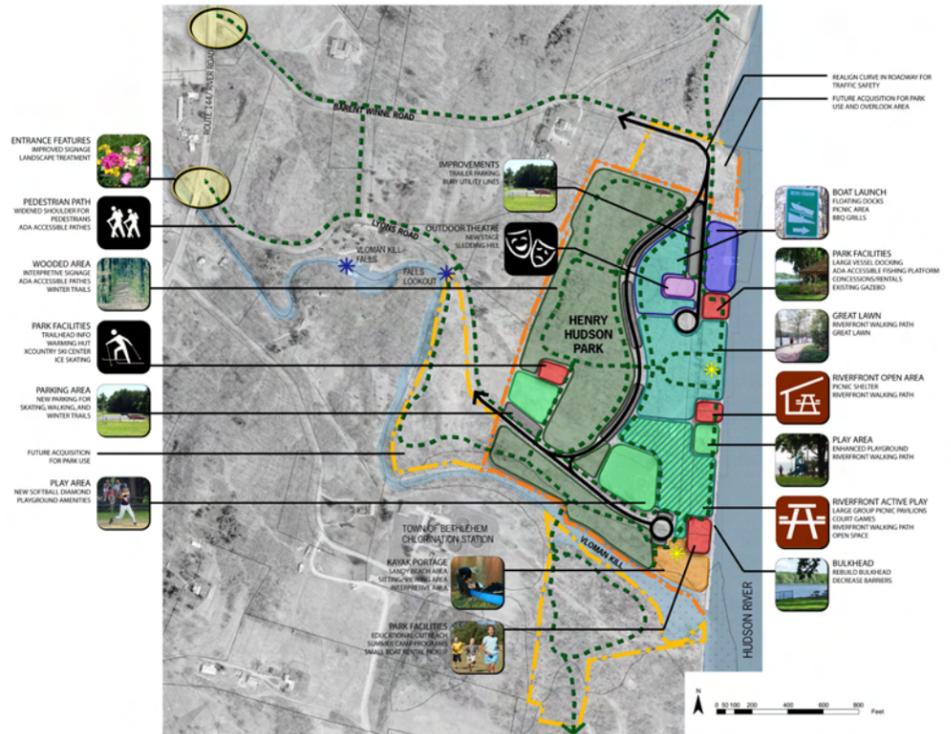
Henry Hudson Park Master Plan



Henry Hudson Park Long Term Master Plan



Short Term Park Program



Long Term Park Program

Taconic Viewshed

The Taconic Viewshed District provides exceptional views of the Taconic Mountain Range to the east. Steep slopes, limiting future development opportunities, define much of the district. However, some opportunities exist to create some visually interesting experiences along the ridgeline.

Taconic Viewshed District Projects

Preserve and improve viewing opportunities of the Taconic Mountains

The Taconic Viewshed District provides some dramatic views of the Taconic Mountain Range to the east, particularly at Weisheit Road and Wemple Road and various locations along Clapper Road. Near the intersection of these two roads there is an opportunity to develop a small-scale scenic lookout park. This park could include a small pull-off area for vehicles to park as well as some picnicking facilities with tables, benches and shade trees. As an educational opportunity, an interpretive sign could be included that describes the view and discuss the geological history of the Taconic Mountain Range. The use of a scenic overlay district should be considered as a way to ensure that new development does not cut off the views of the Taconic Mountain Range and River.

South Riverfront District

Defined by its peacefulness and diversity, the South Riverfront District is a unique place. It provides an important expression of the rich history in both the Town and the region as well as the ecological value of the riverfront. The district is recognized for its long established green space and has cultural and heritage interpretation opportunities. The District is also easily accessible from the Thruway via Exit 22, which should be leveraged with future redevelopment opportunities. Future uses in the district should enhance interpretation and protection of the cultural and environmental aspects of the region, while providing for the protection of open space and the unique viewsheds offered here. Currently, Scenic Hudson, Land Trust, Inc. is in the process of purchasing lands within the district for open space and natural protection, preserving a unique habitat for future generations to enjoy.

Flats

The Flats District is an area with high scenic, recreational, natural and cultural resource value, and should be managed to protect, enhance and interpret these resources wherever possible.

Flats District Programs

Develop a heritage and nature-based strategy

Cultural and historic resources are essential in understanding an area's past settlement patterns and heritage. When protected and preserved, they can also make a significant contribution to the character of a community. The Flats District (and many sites in the Central District) has sites that hold a high value with regard to regional heritage and ecological systems. The Town should bring focused attention to the historic and cultural sites and capitalize on them as a way to build a small tourism base in the community. The Town should consider developing a landmark designation program specifically for the Flats District. The Town should also consider how these cultural and historic resources can be tied into a nature-based program and complement the



work already being performed by Scenic Hudson. A nature-based program would also be a good asset for the community to learn about the natural environment and how ecosystems function at a regional level.

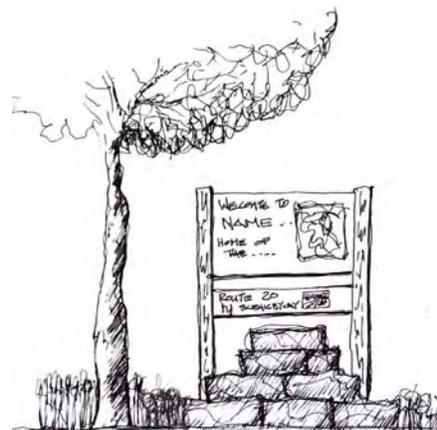
While Scenic Hudson has been making great strides in leading to protect the long-term ecological and heritage value in this District, their mission requires them to balance their time and resources between the needs of different communities. For this reason, the Town's heritage-related and nature-based organizations (such as the Citizens Advisory Committee on Conservation) should work together to study the feasibility of creating an entity dedicated to preservation issues in the Flats District.

One of the most effective ways to protect natural and heritage resources is to strengthen the involvement of local governments in nature-based and heritage planning. Rather than addressing these issues as an afterthought in the Flats District, the Town should make nature-based, historic and cultural issues an integral part of the planning process for any project proposed in the District.

Flats District Projects

Opportunity Area: Baker Farm Site

The Baker Farm Site provides a great deal of opportunity within the Flats District. It is located directly off the Thruway and provides dramatic, sweeping views of both the Taconic Mountain Range and the Hudson River. Because of its unique setting and accessibility, this site can provide a unique opportunity for a nature and heritage tourism-based venture, enhancing interpretation and protection of the cultural and environmental aspects of the region. A good example of a project that expresses and educates the public about the region's heritage is a program that has been promoted (but not yet fully realized) by a Bethlehem Town resident known as *New Netherlands: An Exploration of Past and Present*. This program educates the public about who, what, why and how the Dutch settled in the region. Programs like this not only bring people in touch with the roots of the region, but can also contribute to the Town's economic base by attracting visitors.



Some areas in the Flats Sub-District provide opportunity for both cultural and environmental interpretation.

Riverfront-Wide

The following recommendations pertain to all three districts identified above: North Riverfront, Central Riverfront, and South Riverfront.

Riverfront-Wide Programs

Assess the Route 144 corridor for targeted transportation improvements (Design guidelines for transportation improvements that consider preservation of historic, scenic and environmental values along with mobility, safety and economics)

An important value of this LWRP is to create a sense of place by expressing the region's history and culture and to reflect quality in design. The Route 144 corridor forms important impressions about the Town. As the area grows into the vision and recommendations outlined in this LWRP, more visitors can be expected at key locations along the corridor. The goal then will be to move these visitors from their vehicles as drivers into the community as pedestrians to "experience" Bethlehem. It will be important that visitors "feel" comfortable outside their vehicles. For the majority of the Route 144 corridor the speed limit is 55 MPH. Excessive vehicle speeds and movement conflicts between cars and pedestrians can detract from a potential visitor's desire to come to Bethlehem's attractions. Consequently, context sensitive traffic calming measures should be taken, particularly where pedestrian activity will be higher.

Encourage and support acquisitions and conservation easements

The Comprehensive Plan encourages the creation of a Purchase of Development Rights program for farmland and open space protection. Many areas within the Waterfront Revitalization Area include properties that would be good candidates for such a program. Further, the Comprehensive Plan survey found that seventy-three percent of survey respondents agreed or strongly agreed that the town should buy land or purchase conservation easements to preserve open land. The use of a PDR program should be considered for key open space areas (as defined in the Town's future Open Space Plan) within the Riverfront Corridor.

Lead discussions with neighboring communities to coordinate/comment on development initiatives on the Riverfront

As the region continues to experience growth it will become increasingly important for the region's leaders to take a comprehensive, regional approach to both public and private sector initiatives. This means that intergovernmental communication, coordination, and cooperation will be necessary.

A good example of this need for communication, coordination, and cooperation is demonstrated in the three major projects that have been proposed within the region in the cities of Rensselaer, Troy and Schenectady. It is very possible that if all three projects are built within a similar time frame there could be a saturation of commercial and professional square footage and residential units along the region's waterfront. Intergovernmental planning would provide an opportunity to be proactive in decision-making and allow for a better understanding of how these projects can add value to the

region as a whole. A regional approach to waterfront development will provide overall recommendations for local and overlapping jurisdictions to achieve visions for future growth and avoid inefficient or conflicting development patterns. Many of the recommendations in this LWRP, such as the riverfront trail, the scenic byway, the Bethlehem Venture Center, the redevelopment of the Town-owned property, and development at the Baker Farm, will be influenced by regional initiatives and will realize greater success if there is intergovernmental communication, coordination, and cooperation.

The overall message to the leaders of Bethlehem and neighboring governments is that planning should take the long view in approaching development and that coordinating between jurisdictions is not only more efficient, but more likely to yield development patterns that promote orderly growth. One way to foster greater communication, coordination, and cooperation between the regional government would be to establish inter-governmental agreements, particularly with the on-going discussions to address the combined sewer/stormwater outflows. Bethlehem should be a leader in establishing a dialog between neighboring communities to, at a minimum, understand the initiatives that are being considered for waterfront areas. Perhaps the best way to have this dialog is to schedule quarterly, informal breakfast or lunch gatherings to share current waterfront initiatives. These gatherings could also periodically include not-for-profit organizations like the Open Space Institute, Nature Conservancy, Mohawk Hudson Conservancy, and Scenic Hudson.

- ▶ **Participate in regional strategies to address combined sewer/stormwater outflows**
There is currently an on-going discussion, being led by the Capital District Regional Planning Commission, to address regional sewer and stormwater outflows into the Hudson River. The Town should continue to be a part of these conversations.

- ▶ **Consider partnering with regional municipalities to designate a portion of Route 144 as a NYS Scenic Byway**
New York State established its Scenic Byways Program in 1992 by Article XII-C of the State Highway Law. The law formed the Scenic Byways Advisory Board and designated certain New York State Scenic Byways. The State Scenic Byways legislation recognizes that a coordinated program can provide numerous benefits such as economic development and resources management. Therefore, the legislation encourages communities to make nominations to the Scenic Byways Advisory Board for additional designations.

State Scenic Byway designation offers participating communities the potential for numerous benefits. Byways are a focus of promotional efforts by local and state tourism officials. Byways offer an enjoyable way to understand the special character and history of our state and to develop a better appreciation of its varied resources. An objective along byways is to provide community and traveler services, such as rest areas and picnic facilities, as well as foodservices and accommodations. Developing a byway strategy is an opportunity to market and manage resources in ways that meet the needs of the types and amount of visitors to an area, while accommodating the

desires of the host communities. Byways foster stewardship of the road and its rights-of-way. The key to achieving these benefits is proactive local leadership in the nomination, planning, and management of the byway. The Town should consider partnering with neighboring communities to designate a scenic byway that connects to other nearby byways.

Riverfront-Wide Projects

Develop an integrated bike and pedestrian network the entire length of the corridor

The Town has 10 miles of Riverfront along the Hudson River. One of the Value Statements for this LWRP is to create a multi-use recreational network that allows people to safely move along the riverfront. This LWRP begins to outline a unifying identity for the riverfront that allows movement from passive, interpretive areas in the South Riverfront to more intensely developed areas in the North Riverfront. A priority connection to be explored should be to determine how Henry Hudson Park can develop a trail connection to the Town-owned property on Simmons Road. Further evaluation should also be made to continue south and connect with the emerging interpretive opportunities being created by Scenic Hudson's involvement in this area. A more comprehensive evaluation will be necessary in order to determine how the entire network is developed. In some places the trail will follow the water's edge, while in other areas it may be necessary to follow existing roadways to make connections.

Riverfront Gateway Improvements

While gateways from the roadside provide important first impressions, the Hudson River itself should also be considered an important gateway into the community. This historic river corridor and its bountiful resources represent an important slice of American heritage. Yet, exciting new developments continue to emerge. Whenever projects are proposed along the waterfront, the Town of Bethlehem should explore opportunities to restore the vibrancy of the area's natural landscape, particularly on the Central and South Riverfront District's, while preserving the legacy of the manufacturing industry, but improving the visual integrity, of the North Riverfront District.

Section 5

Techniques for Local Implementation

5.1 Local Laws and Regulations Necessary to Implement the LWRP

5.1.1 Existing local laws and regulations

a. Articles I through V of the Town's Zoning Regulations (Chapter 128 of the Bethlehem Code)

- (1) Description. Articles I through V of the Town's zoning regulations establish various zoning districts (residential, business, industrial, planned development, etc.) in the waterfront revitalization area and identify the uses to be allowed in those districts. The ordinance specifies whether a use is allowed as-of-right or with a special permit. They also establish requirements for area, yard, coverage, and height in each zoning district and indicate what uses require a site plan review. Finally, the regulations contain standards governing such matters as excavations and earthmoving operations, parking, landscaping, and signage.

Articles I through V of the zoning regulations set forth procedures for making zoning decisions and describe the responsibilities of various officials and government bodies. The official responsible for enforcing the regulations is the Zoning Administrator who issues building permits and certificates of compliance. The Zoning Board of Appeals has the responsibility to make determinations on requests for variances and special permits. The Planning Board is responsible for reviewing and approving site plans.

- (2) LWRP Implementation. Articles I through V of the zoning regulations contain provisions which allocate space for port-related uses as well as other water-dependent uses, including marinas, thereby supporting Policies 1 – 3 (Developed Waterfront Policies) and Policies 10 – 13 (Working Waterfront Policies) of the LWRP. Program Policy 4 - 8 (Natural Waterfront Policies) and Policy 9 (Public Waterfront Policies) is furthered by basic lot coverage and open space provisions, parking requirements, and site plan review conditions. Policy 3 (Enhance visual quality and protect scenic resources in the waterfront area) is furthered by basic height and bulk requirements, site plan review conditions, and signage regulations. Policy 5 (Water Quality) objectives regarding non-point pollution can be advanced by regulations regarding excavation and earthmoving.

b. Article VI of the Town's Zoning Regulations (Chapter 128 of the Bethlehem Code)

- (1) Description. Article VI Supplementary Regulations contains flood damage prevention regulations. This article applies to all areas of special flood hazard within the Town's jurisdiction as identified by the Federal Emergency Management Agency. Permits are required for development in flood hazard areas. Such development must meet standards specified in the article for such things as anchoring, materials and construction methods, utilities, and floor elevations. The Zoning Administrator is responsible for enforcing the regulations, and the

Zoning Board of Appeals is responsible for making decisions on appeals and requests for variances from the requirements of the regulations.

- (2) LWRP Implementation. The flood damage prevention regulations implement the flooding protection objectives of LWRP Policy 4 (Minimize loss of life, structures, and natural resources from flooding and erosion)

5.1.2 Proposed local laws and regulations

Given that the Town updated its Zoning Ordinance in 2006, the local laws and regulations will effectively implement the desired goals and policies outlined in this LWPR.

Waterfront Consistency Review Law

A new Waterfront Consistency Review Law should be developed to establish a clear procedure for the review of actions for consistency with the LWRP and should establish the Town Planning Board as a formal advisory body on consistency reviews.

5.2 Other Public & Private Actions Necessary to Implement the LWRP

The Town should continue to participate in activities pertaining to investments being made in the Hudson River Estuary System and the Hudson River Remedial Action Plan.

5.3 Management Structure Necessary to Implement the LWRP

The LWRP is to be used to ensure that the actions of government agencies at all levels further the Town of Bethlehem's objectives for its waterfront revitalization area. Section 1 below describes the responsibilities of Town officials and agencies to manage and implement the LWRP, including specific responsibilities pursuant to the Waterfront Consistency Review Law. LWRP implementation is both reactive and proactive. It is reactive (regulatory) in the sense that projects and other proposed actions by private entities and agencies of the state and federal governments are reviewed for consistency with the LWRP. It is proactive in the sense that the Town undertakes projects and programs of its own to advance the LWRP.

5.3.1. Responsibilities of Town Officials and Agencies

a. Lead Officials

The Supervisor, or Supervisor's designee, is the lead official. The Supervisor is responsible for ensuring that provisions of local law relating to the waterfront are implemented; ensuring that State and federal agencies receive local input on actions they plan to undertake in the Town's waterfront area; pursuing funding and other support for projects cited in Section IV of the LWRP; assessing on

an annual basis the progress made in implementing the LWRP; and initiating LWRP revision and updating as necessary.

The Zoning Administrator, along with the Zoning Enforcement and Code Enforcement officers, are the officials responsible for overseeing the day-to-day implementation of the regulatory aspects of the LWRP.

b. Lead Agency

The Town Planning Board as identified in the Waterfront Consistency Review Law, will be the agency that reviews proposed actions in detail and makes recommendations to the appropriate Town agency on the consistency of proposed actions with the LWRP policy standards and conditions. The Planning Board will also be authorized to make recommendations to Town, State and federal agencies concerning local, State or federal actions in the Town's Waterfront Area. The Planning Board is also authorized to assist the various Town Departments on implementing projects proposed in Section IV of the LWRP. Finally, the Planning Board will make recommendations on revising and updating the LWRP.

c. Other Agencies

All agencies in the Town are responsible for determining whether proposed actions for which they are responsible would be consistent with the LWRP policy standards and conditions. In particular, the Planning Board and Zoning Board of Appeals will be responsible for reviewing proposed actions in the proposed Waterfront Area and making determinations based on the provisions of this Area. The Planning and Economic Development Department will be the entity primarily responsible for pursuing development opportunities in the waterfront revitalization area. The Police Department as well as the Department of Parks, will assist with enforcement of the Harbor Management Law. The Town Board will be responsible for adopting any legislative updates necessary to carry out the LWRP.

5.3.2 Procedures for Reviewing State and Federal Actions

Guidelines for Notification and Review of State Agency Actions Where Local Waterfront Revitalization Programs Are In Effect

a. Purposes of Guidelines

- (1) The Waterfront Revitalization of Coastal Resources and Inland Waterways Act (Article 42 of the Executive Law) and the Department of State's regulations (19 NYCRR Part 600) require certain State agency actions identified by the Secretary of State to be consistent to the maximum extent practicable with the policies and purposes of approved Local Waterfront Revitalization Programs. These guidelines are intended to assist state agencies in meeting that statutory consistency obligation.

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- (2) The Act also requires that state agencies provide timely notice to the situs local government whenever an identified action will occur within an area covered by an approved LWRP. These guidelines describe a process for complying with this notification requirement. They also provide procedures to assist local governments in carrying out their review responsibilities in a timely manner.
 - (3) The Secretary of State is required by the Act to confer with state agencies and local governments when notified by a local government that a proposed state agency action may conflict with the policies and purposes of its approved LWRP. These guidelines establish a procedure for resolving such conflicts.

b. Definitions

Action means:

- (1) A "Type I" or "Unlisted" action as defined by the State Environmental Quality Review Act (SEQRA);
- (2) Occurring within the boundaries of the LWRP; and
- (3) Being taken pursuant to a state agency program or activity which has been identified by the Secretary of State as likely to affect the policies and purposes of the LWRP.

Consistent to the maximum extent practicable means that an action will not substantially hinder the achievement of any of the policies and purposes of an approved LWRP and, whenever practicable, will advance one or more of such policies. If an action will substantially hinder any of the policies or purposes of an approved LWRP, then the action must be one:

- (1) For which no reasonable alternatives exist that would avoid or overcome any substantial hindrance;
- (2) That will minimize all adverse effects on the policies or purposes of the LWRP to the maximum extent practicable;
- (3) That will result in an overriding regional or statewide public benefit; and
- (4) That will advance one or more of the other coastal policies.

Local Waterfront Revitalization Program or LWRP means a program prepared and adopted by the Town of Bethlehem Town Board and approved by the Secretary of State pursuant to Executive Law, Article 42; which program contains policies on the management of land, water, and man-made resources, proposed land uses and specific projects that are essential to program implementation.

c. Notification Procedure

- (1) When a state agency is considering an action within the defined boundary of the LWRP, the state agency shall notify the Supervisor of the Town of Bethlehem.
- (2) Notification of a proposed action by a state agency shall fully describe the nature and location of the action; shall be accomplished by use of either the State Clearinghouse, other existing state agency notification procedures, or through any alternative procedure agreed upon by the state agency and the Town of Bethlehem; and should be provided to the Supervisor as early in the planning stages as possible, but in any event at least 30 days prior to the agency's decision on the action. (The timely filing of a copy of a completed Coastal Assessment Form to the Supervisor of the Town of Bethlehem should be considered adequate notification of a proposed action.)
- (3) If the proposed action will require the preparation of a draft environmental impact statement, the filing of this draft document with the Supervisor of the Town of Bethlehem can serve as the state agency's notification to the Town of Bethlehem.

d. Local Government Review Procedure

- (1) Upon receipt of notification from a state agency, the Town of Bethlehem will be responsible for evaluating a proposed action against the policies and purposes of its approved LWRP. Upon request of the Supervisor of the Town of Bethlehem, the state agency should promptly provide the Town with whatever additional information is available which will assist the Town to evaluate the proposed action.
- (2) If the Town of Bethlehem cannot identify any conflicts between the proposed action and the applicable policies and purposes of its approved LWRP, it should inform the state agency in writing of its finding. Upon receipt of the Town's finding, the state agency may proceed with its consideration of the proposed action in accordance with 19 NYCRR Part 600.
- (3) If the Town of Bethlehem does not notify the state agency in writing of its finding within the established review period, the state agency may then presume that the proposed action does not conflict with the policies and purposes of the Town's approved LWRP.
- (4) If the Town of Bethlehem notifies the state agency in writing that the proposed action does conflict with the policies and/or purposes of its approved LWRP, the state agency shall not proceed with its consideration of, or decision on, the proposed action as long as the Resolution of Conflicts procedure established in (e) below shall apply. The Town of Bethlehem shall forward a copy of the identified conflicts to the Secretary of State at the time when the state agency is notified. In notifying the state agency, the Town shall identify the specific policies and purposes of the LWRP with which the proposed action conflicts.

e. Resolution of Conflicts

The following procedure applies whenever the Town of Bethlehem has notified the Secretary of State and state agency that a proposed action conflicts with the policies and purposes of its approved LWRP.

- (1) Upon receipt of notification from the Town of Bethlehem that a proposed action conflicts with its approved LWRP, the state agency should contact the Supervisor of the Town of Bethlehem to discuss the content of the identified conflicts and the means for resolving them. A meeting of state agency and Town of Bethlehem representatives may be necessary to discuss and resolve the identified conflicts. This discussion should take place within 30 days of the receipt of a conflict notification from the Town.
- (2) If the discussion between the Town of Bethlehem and the state agency results in the resolution of the identified conflicts, then, within seven days of the discussion, the Town shall notify the state agency in writing, with a copy forwarded to the Secretary of State, that all of the identified conflicts have been resolved. The State agency can then proceed with its consideration of the proposed action in accordance with 19 NYCRR Part 600.
- (3) If the consultation between the Town of Bethlehem and the state agency does not lead to the resolution of the identified conflicts, either party may request, in writing, the assistance of the Secretary of State to resolve any or all of the identified conflicts. The Secretary must receive this request within 15 days following the discussion between the Town of Bethlehem and the state agency. The party requesting the assistance of the Secretary of State shall forward a copy of their request to the other party.
- (4) Within 30 days following the receipt of a request for assistance, the Secretary, or a Department of State official or employee designated by the Secretary, will discuss the identified conflicts and circumstances preventing their resolution with appropriate representatives from the state agency and Town of Bethlehem.
- (5) If agreement among all parties cannot be reached during this discussion, the Secretary shall, within fifteen days, notify both parties of his/her findings and recommendations.
- (6) The state agency shall not proceed with its consideration of, or decision on, the proposed action as long as the foregoing Resolution of Conflicts procedures shall apply.

Procedural Guidelines for Coordinating New York State Department of State and Local Waterfront Revitalization Program Consistency Review of Federal Agency Actions

a. Direct Actions

- (1) After acknowledging the receipt of a consistency determination and supporting documentation from a federal agency, DOS will forward copies of the determination and other descriptive information on the proposed direct action to the Supervisor of the Town of Bethlehem and to other interested parties.
- (2) This notification will indicate the date by which all comments and recommendations must be submitted to DOS and will identify the Department's principal reviewer for the proposed action.
- (3) The review period will be about twenty-five (25) days. If comments and recommendations are not received by the date indicated in the notification, DOS will presume that the Town has "no opinion" on the consistency of the proposed direct federal agency action with the LWRP policies.
- (4) If DOS does not fully concur with and/or has any questions on the comments and recommendations submitted by the Town, DOS will contact the appropriate Town official(s) to discuss any differences of opinion or questions prior to agreeing or disagreeing with the federal agency's consistency determination on the proposed direct action.
- (5) A copy of DOS' "agreement" or "disagreement" letter to the federal agency will be forwarded to the Supervisor of the Town of Bethlehem.

b. Permit and License Actions

- (1) DOS will acknowledge the receipt of an applicant's consistency certification and application materials. At that time, DOS will forward a copy of the submitted documentation to the Supervisor of the Town of Bethlehem and will identify the Department's principal reviewer for the proposed action.
- (2) Within thirty (30) days of receiving such information, the Supervisor, or the Supervisor's representative, will contact the principal reviewer for DOS to discuss:
 - (a) the need to request additional information for review purposes; and
 - (b) any possible problems pertaining to the consistency of a proposed action with the LWRP policies.

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- (3) When DOS and the local program coordinator agree that additional information is necessary, DOS will request the applicant to provide the information. A copy of this information will be provided to the local program coordinator upon receipt.
 - (4) Within thirty (30) days of receiving the requested information or discussing possible problems of a proposed action with the principal reviewer for DOS, whichever is later, the local program coordinator will notify DOS of the reason why a proposed action may be inconsistent or consistent with the LWRP policies.
 - (5) After that notification, the local program coordinator will submit the municipality's written comments and recommendations on a proposed permit action to DOS before or at the conclusion of the official public comment period. If such comments and recommendations are not forwarded to DOS by the end of the public comment period, DOS will assume that the Town has "no opinion" on the consistency of the proposed action with the LWRP policies.
 - (6) If DOS does not fully concur with and/or has any questions on the comments and recommendations submitted by the Town on a proposed permit action, DOS will contact the local program coordinator to discuss any differences of opinion prior to issuing a letter of "concurrence" or "objection" to the applicant.
 - (7) A copy of the DOS' "concurrence" or "objection" letter to the applicant will be forwarded to the local program coordinator.

c. Financial Assistance Actions

- (1) Upon receiving notification of a proposed federal financial assistance action, DOS will request information on the action from the applicant for consistency review purposes. As appropriate, DOS will also request the applicant to provide a copy of the application documentation to the program coordinator. A copy of this letter will be forwarded to the local program coordinator and will serve as notification that the proposed action may be subject to review.
- (2) DOS will acknowledge the receipt of the requested information and provide a copy of this acknowledgment to the local program coordinator. DOS may, at this time, request the applicant to submit additional information for review purposes.
- (3) The review period will conclude thirty (30) days after the date on DOS' letter of acknowledgment or the receipt of requested additional information, whichever is later. The review period may be extended for major financial assistance actions.
- (4) The local program coordinator must submit the Town's comments and recommendations on the proposed action to DOS within twenty days (or other time agreed to by DOS and the local program coordinator) from the start of the review period. If comments and recommendations are not received within this period, DOS will presume that the Town has "no opinion" on the consistency of the proposed financial assistance action with the LWRP policies.

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- (5) If DOS does not fully concur with and/or has any questions on the comments and recommendations submitted by the Town, DOS will contact the local program coordinator to discuss any differences of opinion or questions prior to notifying the applicant of DOS I consistency decision.
 - (6) A copy of DOS consistency decision letter to the applicant will be forwarded to the local program coordinator.

5.4 Financial Resources Necessary to Implement the LWRP

- 5.4.1. The Town will budget annually for management and maintenance of its waterfront; facilities (Henry Hudson Park), for administration of the LWRP, and enforcement of the Harbor Management Law.
- 5.4.2 The Town will apply for state and federal funds (e.g., the state Environmental Protection Fund, New York State Quality Communities, Brownfield Opportunity Areas, etc.) to implement components of its LWRP.

Section 6

State & Federal Actions & Programs Likely to Affect Implementation

State actions will affect and be affected by the implementation of the LWRP. Under State law, certain State actions within or affecting the local waterfront area must be “consistent” or “consistent to the maximum extent practicable” with the enforceable policies and purposes of the LWRP. This “consistency requirement” makes the LWRP a unique, intergovernmental mechanism for setting policy and making decisions. This also helps to prevent detrimental actions from occurring and future options from being needlessly foreclosed. At the same time, the active participation of State agencies is also likely to be necessary to implement specific provisions of the LWRP.

The first part of this section identifies the actions and programs of State agencies that should be undertaken in a manner consistent with the LWRP. This is a generic list of actions and programs, as identified by the NYS Department of State; therefore, some of the actions and programs listed may not be relevant to this LWRP. Pursuant to the State Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Executive Law, Article 42), the Secretary of State individually and separately notifies affected State agencies of those agency actions and programs that are to be undertaken in a manner consistent with approved LWRPs. The lists of State actions and programs included herein are informational only and do not represent or substitute for the required identification and notification procedures. The current official lists of actions subject to State consistency requirements may be obtained from the NYS Department of State.

The second part of this section is a more focused and descriptive list of State agency actions that are necessary for further implementation of the LWRP. It is recognized that a State agency’s ability to undertake such actions is subject to a variety of factors and considerations; that the consistency provisions referred to above, may not apply; and that the consistency requirements cannot be used to require a State agency to undertake an action it could not undertake pursuant to other provisions of law.

6.1 State Programs That Should Be Undertaken in a Manner Consistent with the LWRP

OFFICE FOR THE AGING

- 1.00 Funding and/or approval of programs for the establishment of new or expanded facilities providing various services for the elderly.

DEPARTMENT OF AGRICULTURE AND MARKETS

- 1.00 Agricultural Districts Program
- 2.00 Rural Development Program
- 3.00 Farm Worker Services Programs
- 4.00 Permit and approval programs:

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- 4.01 Custom Slaughters/Processor Permit
 - 4.02 Processing Plant License
 - 4.03 Refrigerated Warehouse and/or Locker Plant License

DIVISION OF ALCOHOLIC BEVERAGE CONTROL/STATE LIQUOR AUTHORITY

1.00 Permit and Approval Programs:

- 1.01 Ball Park - Stadium License
- 1.02 Bottle Club License
- 1.03 Bottling Permits
- 1.04 Brewer's Licenses and Permits
- 1.05 Brewer's Retail Beer License
- 1.06 Catering Establishment Liquor License
- 1.07 Cider Producer's and Wholesaler's Licenses
- 1.08 Club Beer, Liquor, and Wine Licenses
- 1.09 Distiller's Licenses
- 1.10 Drug Store, Eating Place, and Grocery Store Beer Licenses
- 1.11 Farm Winery and Winery Licenses
- 1.12 Hotel Beer, Wine, and Liquor Licenses
- 1.13 Industrial Alcohol Manufacturer's Permits
- 1.14 Liquor Store License
- 1.15 On-Premises Liquor Licenses
- 1.16 Plenary Permit (Miscellaneous-Annual)
- 1.17 Summer Beer and Liquor Licenses
- 1.18 Tavern/Restaurant and Restaurant Wine Licenses
- 1.19 Vessel Beer and Liquor Licenses
- 1.20 Warehouse Permit
- 1.21 Wine Store License
- 1.22 Winter Beer and Liquor Licenses
- 1.23 Wholesale Beer, Wine, and Liquor Licenses

DIVISION OF ALCOHOLISM AND SUBSTANCE ABUSE SERVICES

1.00 Facilities, construction, rehabilitation, expansion, or demolition or the funding of such activities.

2.00 Permit and approval programs:

- 2.01 Certificate of approval (Substance Abuse Services Program)

3.00 Permit and approval:

- 3.01 Letter Approval for Certificate of Need

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- 3.02 Operating Certificate (Alcoholism Facility)
 - 3.03 Operating Certificate (Community Residence)
 - 3.04 Operating Certificate (Outpatient Facility)
 - 3.05 Operating Certificate (Sobering-Up Station)

COUNCIL ON THE ARTS

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Architecture and environmental arts program.

DEPARTMENT OF BANKING

- 1.00 Permit and approval programs:
 - 1.01 Authorization Certificate (Bank Branch)
 - 1.02 Authorization Certificate (Bank Change of Location)
 - 1.03 Authorization Certificate (Bank Charter)
 - 1.04 Authorization Certificate (Credit Union Change of Location)
 - 1.05 Authorization Certificate (Credit Union Charter)
 - 1.06 Authorization Certificate (Credit Union Station)
 - 1.07 Authorization Certificate (Foreign Banking Corporation Change of Location)
 - 1.08 Authorization Certificate (Foreign Banking Corporation Public Accommodations Office)
 - 1.09 Authorization Certificate (Investment Company Branch)
 - 1.10 Authorization Certificate (Investment Company Change of Location)
 - 1.11 Authorization Certificate (Investment Company Charter)
 - 1.12 Authorization Certificate (Licensed Lender Change of Location)
 - 1.13 Authorization Certificate (Mutual Trust Company Charter)
 - 1.14 Authorization Certificate (Private Banker Charter)
 - 1.15 Authorization Certificate (Public Accommodation Office - Banks)
 - 1.16 Authorization Certificate (Safe Deposit Company Branch)
 - 1.17 Authorization Certificate (Safe Deposit Company Change of Location)
 - 1.18 Authorization Certificate (Safe Deposit Company Charter)
 - 1.19 Authorization Certificate (Savings Bank Charter)
 - 1.20 Authorization Certificate (Savings Bank De Novo Branch Office)
 - 1.21 Authorization Certificate (Savings Bank Public Accommodations Office)
 - 1.22 Authorization Certificate (Savings and Loan Association Branch)
 - 1.23 Authorization Certificate (Savings and Loan Association Change of Location)
 - 1.24 Authorization Certificate (Savings and Loan Association Charter)
 - 1.25 Authorization Certificate (Subsidiary Trust Company Charter)
 - 1.26 Authorization Certificate (Trust Company Branch)
 - 1.27 Authorization Certificate (Trust Company-Change of Location)
 - 1.28 Authorization Certificate (Trust Company Charter)

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- 1.29 Authorization Certificate (Trust Company Public Accommodations Office)
 - 1.30 Authorization to Establish a Life Insurance Agency
 - 1.31 License as a Licensed Lender
 - 1.32 License for a Foreign Banking Corporation Branch

DEPARTMENT OF CORRECTIONAL SERVICES

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

DORMITORY AUTHORITY OF THE STATE OF NEW YORK

- 1.00 Financing of higher education and health care facilities.
- 2.00 Planning and design services assistance program.

DEPARTMENT OF ECONOMIC DEVELOPMENT

- 1.00 Preparation or revision of statewide or specific plans to address State economic development needs.
- 2.00 Allocation of the state tax-free bonding reserve.

EDUCATION DEPARTMENT

- 1.00 Facilities construction, rehabilitation, expansion, demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Certification of Incorporation (Regents Charter)
 - 2.02 Private Business School Registration
 - 2.03 Private School License
 - 2.04 Registered Manufacturer of Drugs and/or Devices
 - 2.05 Registered Pharmacy Certificate
 - 2.06 Registered Wholesale of Drugs and/or Devices
 - 2.07 Registered Wholesaler-Repacker of Drugs and/or Devices
 - 2.08 Storekeeper's Certificate

ENERGY PLANNING BOARD AND ENERGY OFFICE

- 1.00 Preparation and revision of the State Energy Master Plan.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

- 1.00 Issuance of revenue bonds to finance pollution abatement modifications in power-generation facilities and various energy projects.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- 1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of lands under the jurisdiction of the Department.
- 2.00 Classification of Waters Program; classification of land areas under the Clean Air Act.
- 3.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 4.00 Financial assistance/grant programs:
 - 4.01 Capital projects for limiting air pollution
 - 4.02 Cleanup of toxic waste dumps
 - 4.03 Flood control, beach erosion and other water resource projects
 - 4.04 Operating aid to municipal wastewater treatment
 - 4.05 Resource recovery and solid waste management capital projects
 - 4.06 Wastewater treatment facilities
- 5.00 Funding assistance for issuance of permits and other regulatory activities (New York City only).
- 6.00 Implementation of the Environmental Quality Bond Act of 1972, including:
 - (a) Water Quality Improvement Projects
 - (b) Land Preservation and Improvement Projects including Wetland Preservation and Restoration Projects, Unique Area Preservation Projects, Metropolitan Parks Projects, Open Space Preservation Projects and Waterways Projects.

- 7.00 Marine Finfish and Shellfish Programs.

- 8.00 New York Harbor Drift Removal Project.

- 9.00 Permit and approval programs:

AIR RESOURCES

- 9.01 Certificate of Approval for Air Pollution Episode Action Plan
- 9.02 Certificate of Compliance for Tax Relief – Air Pollution Control Facility
- 9.03 Certificate to Operate: Stationary Combustion Installation; Incinerator; Process, Exhaust or ventilation system

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- 9.04 Permit for Burial of Radioactive Material
 - 9.05 Permit for Discharge of Radioactive Material to Sanitary Sewer
 - 9.06 Permit for Restricted Burning
 - 9.07 Permit to Construct: a Stationary Combustion Installation; Incinerator; Indirect Source of Air Contamination; Process, Exhaust or Ventilation System

CONSTRUCTION MANAGEMENT

- 9.08 Approval of Plans and Specifications for Wastewater Treatment Facilities

FISH AND WILDLIFE

- 9.09 Certificate to Possess and Sell Hatchery Trout in New York State
- 9.10 Commercial Inland Fisheries Licenses
- 9.11 Fishing Preserve License
- 9.12 Fur Breeder's License
- 9.13 Game Dealer's License
- 9.14 Licenses to Breed Domestic Game Animals
- 9.15 License to Possess and Sell Live Game
- 9.16 Permit to Import, Transport and/or Export under Section 184.1(11-0511)
- 9.17 Permit to Raise and Sell Trout
- 9.18 Private Bass Hatchery Permit
- 9.19 Shooting Preserve Licenses
- 9.20 Taxidermy License
- 9.21 Permit - Article 15, (Protection of Water) - Dredge or Deposit Material in a Waterway
- 9.22 Permit - Article 15, (Protection of Water) - Stream Bed or Bank Disturbances
- 9.23 Permit - Article 24, (Freshwater Wetlands)

HAZARDOUS SUBSTANCES

- 9.24 Permit to Use Chemicals for the Control or Elimination of Aquatic Insects
- 9.25 Permit to Use Chemicals for the Control or Elimination of Aquatic Vegetation
- 9.26 Permit to Use Chemicals for the Control or Extermination of Undesirable Fish

LANDS AND FOREST

- 9.27 Certificate of Environmental Safety (Liquid Natural Gas and Liquid Petroleum Gas)
- 9.28 Floating Object Permit
- 9.29 Marine Regatta Permit
- 9.30 Navigation Aid Permit

MARINE RESOURCES

- 9.31 Digger's Permit (Shellfish)

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- 9.32 License of Menhaden Fishing Vessel
 - 9.33 License for Non-Resident Food Fishing Vessel
 - 9.34 Non-Resident Lobster Permit
 - 9.35 Marine Hatchery and/or Off-Bottom Culture Shellfish Permits
 - 9.36 Permits to Take Blue-Claw Crabs
 - 9.37 Permit to Use Pond or Trap Net
 - 9.38 Resident Commercial Lobster Permit
 - 9.39 Shellfish Bed Permit
 - 9.40 Shellfish Shipper's Permits
 - 9.41 Special Permit to Take Surf Clams from Waters other than the Atlantic Ocean
 - 9.42 Permit - Article 25, (Tidal Wetlands)

MINERAL RESOURCES

- 9.43 Mining Permit
- 9.44 Permit to Plug and Abandon (a non-commercial, oil, gas or solution mining well)
- 9.45 Underground Storage Permit (Gas)
- 9.46 Well Drilling Permit (Oil, Gas, and Solution Salt Mining)

SOLID WASTES

- 9.47 Permit to Construct and/or Operate a Solid Waste Management Facility
- 9.48 Septic Tank Cleaner and Industrial Waste Collector Permit

WATER RESOURCES

- 9.49 Approval of Plans for Wastewater Disposal Systems
- 9.50 Certificate of Approval of Realty Subdivision Plans
- 9.51 Certificate of Compliance (Industrial Wastewater Treatment Facility)
- 9.52 Letters of Certification for Major Onshore Petroleum Facility Oil Spill Prevention and Control Plan
- 9.53 Permit - Article 36, (Construction in Flood Hazard Areas)
- 9.54 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas
- 9.55 State Pollutant Discharge Elimination System (SPDES) Permit
- 9.56 Approval -Drainage Improvement District
- 9.57 Approval - Water (Diversion for) Power
- 9.58 Approval of Well System and Permit to Operate
- 9.59 Permit - Article 15, (Protection of Water) - Dam
- 9.60 Permit - Article 15, Title 15 (Water Supply)
- 9.61 River Improvement District Approvals

10.00 Preparation and revision of Air Pollution State Implementation Plan.

11.00 Preparation and revision of Continuous Executive Program Plan.

12.00 Preparation and revision of Statewide Environmental Plan.

13.00 Protection of Natural and Man-made Beauty Program.

14.00 Urban Fisheries Program.

15.00 Urban Forestry Program.

16.00 Urban Wildlife Program.

ENVIRONMENTAL FACILITIES CORPORATION

1.00 Financing program for pollution control facilities for industrial firms and small businesses.

FACILITIES DEVELOPMENT CORPORATION

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

OFFICE OF GENERAL SERVICES

1.00 Administration of the Public Lands Law for acquisition and disposition of lands, grants of land and grants of easement of land under water, issuance of licenses for removal of materials from lands under water, and oil and gas leases for exploration and development.

2.00 Administration of Article 4-B, Public Buildings Law, in regard to the protection and management of State historic and cultural properties and State uses of buildings of historic, architectural or cultural significance.

3.00 Facilities construction, rehabilitation, expansion, or demolition

DEPARTMENT OF HEALTH

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

2.00 Permit and approval programs:

2.01 Approval of Completed Works for Public Water Supply Improvements

2.02 Approval of Plans for Public Water Supply Improvements

2.03 Certificate of Need (Health Related Facility – except Hospitals)

2.04 Certificate of Need (Hospitals)

2.05 Operating Certificate (Diagnostic and Treatment center)

2.06 Operating Certificate (Health Related Facility)

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- 2.07 Operating Certificate (Hospice)
 - 2.08 Operating Certificate (Hospital)
 - 2.09 Operating Certificate (Nursing Home)
 - 2.10 Permit to Operate a Children's Overnight or Day Camp
 - 2.11 Permit to Operate a Migrant Labor Camp
 - 2.12 Permit to Operate as a Retail Frozen Dessert Manufacturer
 - 2.13 Permit to Operate a Service Food Establishment
 - 2.14 Permit to Operate a Temporary Residence/Mass Gathering
 - 2.15 Permit to Operate or Maintain a Swimming Pool or Public Bathing Beach
 - 2.16 Permit to Operate Sanitary Facilities for Realty Subdivisions
 - 2.17 Shared Health Facility Registration Certificate

DIVISION OF HOUSING AND COMMUNITY RENEWAL AND ITS SUBSIDIARIES AND AFFILIATES

- 1.00 Facilities construction, rehabilitation, expansion, or demolition.
- 2.00 Financial assistance/grant programs:
 - 2.01 Federal Housing Assistance Payments Programs (Section 8 Programs)
 - 2.02 Housing Development Fund Programs
 - 2.03 Neighborhood Preservation Companies Program
 - 2.04 Public Housing Programs
 - 2.05 Rural Initiatives Grant Program
 - 2.06 Rural Preservation Companies Program
 - 2.07 Rural Rental Assistance Program
 - 2.08 Special Needs Demonstration Projects
 - 2.09 Urban Initiatives Grant Program
 - 2.10 Urban Renewal Programs
- 3.00 Preparation and implementation of plans to address housing and community renewal needs.

HOUSING FINANCE AGENCY

- 1.00 Funding programs for the construction, rehabilitation, or expansion of facilities.
- 2.00 Affordable Housing Corporation

JOB DEVELOPMENT AUTHORITY

- 1.00 Financing assistance programs for commercial and industrial facilities.

MEDICAL CARE FACILITIES FINANCING AGENCY

1.00 Financing of medical care facilities.

OFFICE OF MENTAL HEALTH

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

2.00 Permit and approval programs:

2.01 Operating Certificate (Community Residence)

2.02 Operating Certificate (Family Care Homes)

2.03 Operating Certificate (Inpatient Facility)

2.04 Operating Certificate (Outpatient Facility)

OFFICE OF MENTAL RETARDATION AND DEVELOPMENT DISABILITIES

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

2.00 Permit and approval programs:

2.01 Establishment and Construction Prior Approval

2.02 Operating Certificate Community Residence

2.03 Outpatient Facility Operating Certificate

DIVISION OF MILITARY AND NAVAL AFFAIRS

1.00 Preparation and implementation of the State Disaster Preparedness Plan

NATURAL HERITAGE TRUST

1.00 Funding program for natural heritage institutions.

OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION (including regional State Park Commission)

1.00 Acquisition, disposition, lease, grant of easement or other activities related to the management of land under the jurisdiction of the Office.

2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

3.00 Funding program for recreational boating, safety and enforcement.

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- 5.00 Land and Water Conservation
 - 6.00 Nomination of properties to the Federal and/or State Register of Historic Places.
 - 7.00 Permit and approval programs:
 - 7.01 Floating Objects Permit
 - 7.02 Marine Regatta Permit
 - 7.03 Navigation Aide Permit
 - 7.04 Posting of Signs Outside State Parks
 - 8.00 Preparation and revision of the Statewide Outdoor Recreation Plan and the Statewide Comprehensive Historic Preservation Plan and other plans for public access, recreation, historic preservation, or related purposes.
 - 9.00 Recreation services program.
 - 10.00 Urban Cultural Parks Program.

POWER AUTHORITY OF THE STATE OF NEW YORK

- 1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the Authority.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition.

NEW YORK STATE SCIENCE AND TECHNOLOGY FOUNDATION

- 1.00 Corporation for Innovation Development Program.
- 2.00 Center for Advanced Technology Program.

DEPARTMENT OF SOCIAL SERVICES

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Homeless Housing and Assistance Program.
- 3.00 Permit and approval programs:
 - 3.01 Certificate of Incorporation (Adult Residential Care Facilities)
 - 3.02 Operating Certificate (Children's Services)
 - 3.03 Operating Certificate (Enriched Housing Program)

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- 3.04 Operating Certificate (Home for Adults)
 - 3.05 Operating Certificate (Proprietary Home)
 - 3.06 Operating Certificate (Public Home)
 - 3.07 Operating Certificate (Special Care Home)
 - 3.08 Permit to Operate a Day Care Center

DEPARTMENT OF STATE

- 1.00 Coastal Management Program.
- 2.00 Community Services Block Grant Program.
- 3.00 Permit and approval programs:
 - 3.01 Billiard Room License
 - 3.02 Cemetery Operator
 - 3.03 Uniform Fire Prevention and Building Code

STATE UNIVERSITY CONSTRUCTION FUND

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

STATE UNIVERSITY OF NEW YORK

- 1.00 Acquisitions disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the University.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

THRUWAY AUTHORITY/CANAL CORPORATION/CANAL RECREATIONWAY COMMISSION

- 1.00 Acquisitions disposition, lease, grant of easement and other activities related to the management of land and other resources under the jurisdiction of the Thruway Authority, Canal Corporation, and Canal Recreationway Commission.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition.
- 3.00 Permit and approval programs:
 - 3.01 Advertising Device Permit
 - 3.02 Approval to Transport Radioactive Waste
 - 3.03 Occupancy Permit
 - 3.04 Permits for use of Canal System lands and waters.

4.00 Statewide Canal Recreationway Plan

DEPARTMENT OF TRANSPORTATION

1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the Department.

2.00 Construction, rehabilitation, expansion, or demolition of facilities, including but not limited to:

- (a) Highways and parkways
- (b) Bridges on the State highways system
- (c) Highway and parkway maintenance facilities
- (d) Rail facilities

3.00 Financial assistance/grant programs:

- 3.01 Funding programs for construction/reconstruction and reconditioning/preservation of municipal streets and highways (excluding routine maintenance and minor rehabilitation)
- 3.02 Funding programs for development of the ports of Albany, Buffalo, Oswego, Ogdensburg and New York
- 3.03 Funding programs for rehabilitation and replacement of municipal bridges
- 3.04 Subsidies program for marginal branch lines abandoned by Conrail
- 3.05 Subsidies program for passenger rail service

4.00 Permits and approval programs:

- 4.01 Approval of applications for airport improvements (construction projects)
- 4.02 Approval of municipal applications for Section 18 Rural and Small Urban Transit Assistance Grants (construction projects)
- 4.03 Approval of municipal or regional transportation authority applications for funds for design, construction and rehabilitation of omnibus maintenance and storage facilities
- 4.04 Approval of municipal or regional transportation authority applications for funds for design and construction of rapid transit facilities
- 4.05 Certificate of Convenience and Necessity to Operate a Railroad
- 4.06 Highway Work Permits
- 4.07 License to Operate Major Petroleum Facilities
- 4.08 Outdoor Advertising Permit (for off-premises advertising signs adjacent to interstate and primary highway)
- 4.09 Real Property Division Permit for Use of State-Owned Property

5.00 Preparation or revision of the Statewide Master Plan for Transportation and sub-area or special plans and studies related to the transportation needs of the State.

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- 6.00 Water Operation and Maintenance Program--Activities related to the containment of petroleum spills and development of an emergency oil-spill control network.

URBAN DEVELOPMENT CORPORATION AND ITS SUBSIDIARIES AND AFFILIATES

- 1.00 Acquisition, disposition, lease, grant of easement or other activities related to the management of land under the jurisdiction of the Corporation.
- 2.00 Planning, development, financing, construction, major renovation or expansion of commercial, industrial, and civic facilities and the provision of technical assistance or financing for such activities, including, but not limited to, actions under its discretionary economic development programs such as the following:
- (a) Tax-Exempt Financing Program
 - (b) Lease Collateral Program
 - (c) Lease Financial Program
 - (d) Targeted Investment Program
 - (e) Industrial Buildings Recycling Program
- 3.00 Administration of special projects.
- 4.00 Administration of State-funded capital grant programs

DIVISION OF YOUTH

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding or approval of such activities.

6.2 State Programs Necessary to Further the LWRP

DEPARTMENT OF ECONOMIC DEVELOPMENT

1. Any action or provision of funds for the development or promotion of tourism related activities or development.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1. Planning, development, construction, major renovation, or expansion of facilities in the waterfront, including recreational improvement projects.
2. Advance assistance under the Small Communities and Rural Wastewater Treatment Grant Program and a subsequent construction grant subsidy.
3. Review of actions within National Register Districts pursuant to SEQR.

DIVISION OF HOUSING AND COMMUNITY RENEWAL

1. Provision of funding under the Rural Preservation Company Program.
2. Approval of funding for Rural Area Revitalization Program projects.

JOB DEVELOPMENT AUTHORITY

1. Provision of low interest mortgage loans to local non-profit development corporations to finance commercial and industrial facilities.

OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

1. Planning, development, construction, major renovation or expansion of recreational facilities or the provision of funding for such facilities.
2. Provision of funding for State and local activities from the Land and Water Conservation Fund.
3. Planning, development, implementation or the provision of funding for recreation services programs.
4. Certification of properties within the National Register Districts.
5. Provision of funding for State and local historic preservation activities.

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6. Review of Type I actions within the National Historic Districts.
 7. Activities under the Urban Cultural Park program.

DEPARTMENT OF STATE

1. Provision of funding for the implementation of an approved LWRP.
2. Provision of funding under the Community Services Block Grant program.

COUNCIL ON THE ARTS

1. Assistance from the Architecture and Environmental Arts program for a harbor front plan.

DEPARTMENT OF TRANSPORTATION

1. Assistance for street repairs through the Consolidated Highway Improvements Program.
2. Enhancements via the Transportation Efficiency Act for the 21st Century.

THRUWAY AUTHORITY/CANAL CORPORATION/CANAL RECREATIONWAY COMMISSION

1. Approval for leasing of open space shoreline lands for use as public parks is necessary. Disposition of State-owned lands through long-term leases may also be necessary.

OFFICE OF GENERAL SERVICES (OGS)

1. Prior to any development occurring in the water or on the immediate waterfront, OGS will be contacted for a determination of the State's interest in underwater or formerly underwater lands and for authorization to use and occupy such lands.

Section 7

7.1 LOCAL COMMITMENT

The Town of Bethlehem established a Waterfront Advisory Committee to oversee development of the Town’s Local Waterfront Revitalization Program and Harbor Management Plan. The committee included local residents and business owners, as well as Bethlehem department representatives. George Leveille facilitated interaction between the Waterfront Advisory Committee and the consultants selected (Saratoga Associates) to assist Bethlehem with this LWRP. The committee consisted of the following:

Town of Bethlehem Waterfront Advisory Committee Local Waterfront Revitalization Program	
Charlotte Buchanan	Ted Jennings
Ken Daves	Paul Murray
David DeCancio	Theresa Pillittere
Tom Donovan	Howie Vagele
Lisa Evans	
<i>Town of Bethlehem Representatives:</i> George Leveille, Director, Economic Development and Planning Nan Lanahan, Administrator, Parks and Recreation Kathleen Newkirk, Town Clerk Deborah Kitchen, Administrative Aide	

Throughout the year (2007) the Advisory Committee met to advise on the findings and recommendations as the project evolved. In addition to the Advisory Committee meetings, the following public meetings were held to gather the input and perspectives of community residents and business owners:

Town of Bethlehem Public Outreach Local Waterfront Revitalization Program			
Date	Time	Location	Topic
January 23, 2007	7:00 PM	Bethlehem Town Hall	Public Meeting: Issues and opportunities
March 6, 2007	5:00 PM	Bethlehem Town Hall	Focus Group: Development opportunities
March 13, 2007	5:00 PM	Bethlehem Town Hall	Focus Group: Open space/recreation, heritage interpretation, and natural resource protection
October 24, 2007	7:00 PM	Bethlehem Town Hall	Town Board briefing
November 7, 2007	7:00 PM	Bethlehem Town Hall	Public Meeting: Draft LWRP presentation and comments

**Appendix A -
Harbor Management Plan**

Appendix A – HARBOR MANAGEMENT PLAN

Harbor management plans help analyze and resolve conflicts between different (often competing) uses, increasing recreational waterfront needs, multiple regulating authorities, and changing environmental conditions. Such plans can help maximize the productive use of a waterfront area. In order to help address the multiple layers of regulation, Chapter 791 of the Laws of 1992 was enacted, amending Article 42 of the Executive Law (Waterfront Revitalization and Coastal Resources Act) to provide local governments with the clear authority to comprehensively manage activities in harbor and nearshore areas by developing comprehensive harbor management plans and laws to implement those plans.

Harbor management plans must consider regional needs and, as applicable, the competing needs of commercial shipping and recreational boating, commercial and recreational fishing and shellfishing, aquaculture, waste management, mineral extraction, dredging, public access, recreation, habitat and other natural resource protection, water quality, open space, aesthetic values, and common law riparian or littoral rights, and the public interest in underwater lands. They must cover all surface waters within or adjacent to a municipality. This includes in-water areas adjacent to open shorelines as well as actively used enclosed bays or harbors. The harbor management plan provides a rational basis for the allocation and use of space within a harbor or nearshore area. A harbor management plan and its implementation effectively zones surface water areas and underwater lands for specific uses or a range of specific uses in order to avoid conflicts or improve conditions within harbor or nearshore areas.

This plan seeks to address the needs of the Bethlehem waterfront in a comprehensive fashion as outlined by the Waterfront Revitalization and Coastal Resources Act.

A1. THE BETHLEHEM RIVERFRONT

Scenic Quality

The northern end of the Bethlehem riverfront, the Sub-Port industrial area, is adjacent to the Port of Albany. Tank farms and large commercial shipping docks occur in the Sub-Port area and across the River in the Town of East Greenbush. To the south the Bethlehem riverfront becomes less intensely developed and increasingly natural. Residential lots give way to natural and undeveloped areas, home to Scenic Hudson Lands and NYS Department of State significant habitat areas. Across the River rural lands and open space are predominant, breaking only at the Village of Castleton-On-Hudson. Henry Hudson Park in the south offers a unique public viewing opportunity of the Hudson River and less than three miles south is the fifteen-mile Columbia-Greene North Scenic Area of Statewide Significance, a high-quality scenic Hudson resource designated by the NYS Secretary of State in 1993.

Historical Significance

The year 2009 marks the Quadricentennial of the voyage of Henry Hudson and Samuel de Champlain up the Hudson River. Though there is no direct mention that Henry Hudson disembarked in the Vloman and Normans Kill areas in Dutch record, Hudson and crew traveled through Bethlehem on their way north. Henry Hudson Park will be a part of the Quadricentennial celebration and could be a stopping point for the replica of Henry Hudson's ship, the Halfmoon. 2009 is also the Bicentennial of Robert Fulton's first steamboat trip from New York City to Albany.

Water Quality

New York State DEC has classified the Bethlehem reach of the Hudson River as Class "C." Therefore the existing and best use for the river is to support fish populations and non-contact human activities. The northern boundary of the WRA includes the mouth of the Normans Kill. This stretch has also been classified as "C," however upstream the classification has been extended to "CT" which indicates that the Kill may support trout populations. At the southern end of the WRA, adjacent to the Henry Hudson Park is the Vloman Kill. This Kill has also been classified "C," but further upriver and outside the riverfront area the classification improves to class "B," which allows for swimming and other contact recreation but not for drinking water. The lowest classification for water quality is Class "D."

Class "C" waters allow no substance that will change the taste, color, odor, or toxicity of waters for their best use, no significant visible increase in turbidity, no addition of suspended, colloidal, or settleable solids that will adversely affect the rivers best use, no oil, garbage, ashes, or cinders in any amounts, and no phosphorus or nitrogen in amounts that will result in growths of algae, weeds, or slime that will adversely affect the waters best use.

The Hudson River is a water source for the Town of Bethlehem; the Town of Bethlehem Dinmore Road Chlorination Station removes water from the Hudson in the Vloman Kill area. The Town's

Wastewater Treatment Plant discharges treated household wastewater into the Hudson River in the Hamlet of Cedar Hill. A harmful activity for water quality is the discharge of untreated storm water runoff from the Town's Storm Drainage System. Nearby heavy industries also degrade the water quality of the Hudson River.

Underwater land ownership and sites and structures

Though there has not been an archeological survey in this area, one underwater site is known at Henry Hudson Park. A 250-foot barge believed to be an ice-barge lays underwater offshore from the public boat launch. The existence of sunken wooden-hulled ships is possible where areas of land have been made from historic dredging material. Any development extending into the river should coincide with a survey of underwater sites.

Wetlands, Submerged Vegetation and Significant Habitat

Two New York State Department of State (NYSDOS)-identified significant habitats occur within Bethlehem's stretch of the river: the Normans Kill adjacent to the city of Albany and the Shad & Schermerhorn Islands that span the border between the Town of Coeymans and the Town of Bethlehem. At the Normans Kill the freshwater creeks and shallows are an important spawning area for anadromous fish such as alewife, white perch, and blueback herring (also known as blueback shad). A large smallmouth bass population also resides in the area. NYSDOS notes that the creek has experienced severe damage from nearby tank farms, road and railroad crossings, bulkheading, sewage plants, a power plant, shipping channel, and dredging spoils. Recommended actions include limiting existing and proposed water withdrawals especially during vital times of fish spawning and rearing. Drainage from roads and industrial areas as well as release of sewers and other waste should be monitored and controlled. Recreational fishing is a recommended use of this creek.

The shallows, mudflats, and marshes of the Shad and Schermerhorn Islands are important areas for many species. Herons, other waterfowl, deer and other game feed here while the waters are important spawning and nursery grounds for American shad, blueback herring, alewife, white perch, striped bass, and other fish species. The rare species Heart leaf plantain historically grew here, while the estuary beggar-ticks still exist. This habitat is considered good quality and moderately diverse, and has undertaken little disturbance. Recommended actions include studies of the effects of removing bulkhead to encourage wetland growth, monitoring drainage from thruway overpass and agricultural fields to determine the effects on the habitat, removal of unsightly abandoned cabins, and exploration of the use of conservation easements for protection of the natural characteristic of these lands. Recommended uses include low-intensity recreation and a managed game area. Incompatible uses include actions that would remove the natural character of the shallows, mudflats, Vloman and Binnen Kills, and wetland areas.

Along the Bethlehem riverfront several types of aquatic vegetation occur. Predominating the area adjacent to the Hudson River are Submerged Aquatic Vegetation (SAV) and Unvegetated Flats. SAV is important for providing and improving habitat for fish populations as well as its contribution to

primary production, the production of organic compounds from inorganic elements. Further inland occurs Graminoid Vegetation and Tree Swamps. Graminoid Vegetation is the wetlands zone that is periodically flooded with fresh tidal waters while Tree Swamps are the areas characterized by trees (i.e. Maple Trees) that are sporadically submerged by fresh tidal waters.

A2. RIVERFRONT USE AND ZONING

Water-Dependent Uses

Currently, water-based industry is limited to the northern section of the WRA: the Sub-Port, North Harbor, and South Harbor Sub-Districts. Petroleum storage and refinery facilities exist as well as transshipment properties near the Normans Kill. Also near the Normans Kill is Scarano Boat Building, a passenger vessel manufacturer that transports finished excursion vessels through the Hudson River to their ultimate destinations throughout the country. In February 2005 the Albany Steam Power Station was closed and replaced by the Bethlehem Energy Center, both located within the South Harbor Sub-District. This closure caused a remarkable reduction in the use of water from the Hudson River.

At Henry Hudson Park the Town of Bethlehem Parks and Recreation Department constructed a public boat launch in cooperation with New York State Department of Environmental Conservation. Currently the launch is heavily used during the striped bass season, mid-April to the beginning of July. At this time conflicts exist between recreational boaters, motorized and non-motorized, primarily due to traffic and limited ramp access. South of the public boat launch is a special anchorage area. This area is adjacent to Cedar Hill Dike, is 250 feet wide and extends northerly for 1,600 feet. No moorings occur within the Bethlehem stretch of the river.

Existing Land uses

As noted on the *Land Use Map* in Section 2.5, the current land use patterns within the Waterfront Revitalization Area are varied. Agricultural, residential, and industrial uses are prevalent, while some land is vacant or undeveloped. Industrial uses occur along the northern end of the riverfront. Vacant lands here are primarily previously developed industrial lands and some contain remnants of the petroleum refinery industry. Port of Albany businesses, Barker Steel, and Niagara Mohawk own lands here, and Scarano Boat Building has built passenger sail vessels in the area for 25 years.

The central area of the WRA has a mix of community and public services, parks, undeveloped land, and agriculture. Some residential areas exist but are concentrated along the Hudson River and near Interstate 87. Lands along the southern waterfront are predominantly undeveloped, agricultural, or low-density residential. No commercial uses exist adjacent to the riverfront.

Zoning

The *Existing Zoning Map* in Section 2.6 of the LWRP shows that the area west of Route 144 is zoned residential, rural, and rural light industrial with centers for mixed economic development. The area

along the riverfront is divided into two zones. The northern section adjacent to the City of Albany is zoned industrial, while areas south of this are zoned rural riverfront. An area at the intersection of these zones is designated rural hamlet. The purpose of this hamlet is to encourage compact mixed-use development to fulfill area needs while focusing on enhancement of existing conditions, management of future growth, and preservation of unique and historic qualities.

Adjacent Land Use and Zoning

Across the river from the Town of Bethlehem are the Towns of East Greenbush and Schodack, and the Village of Castleton-On-Hudson. While a Local Waterfront Master Plan has not been developed for the Town of East Greenbush, recommendations were given for the waterfront area in the August 2006 Land Use Plan Update. These recommendations included a land bank system for undeveloped coastal lands, remediation and high-level restoration of brownfields, and increased public access to the waterfront. Zoning in the Town of Schodack limits development along the river to planned waterfront and residential agricultural uses including one-family homes, crops and livestock, and sewage treatment facilities. Special permit uses include marinas and other marine-based industries, recreational facilities, cultural, educational, or scientific uses of the coastal resources, or transshipment locations. The zoning of Castleton-On-Hudson allows for transshipment and conservation at the waterfront. Located upriver is the City of Albany. The area of Albany adjacent to Bethlehem and the river is zoned general industrial. To the south of Bethlehem is the Town of Coeymans. The area of Coeymans adjacent to Bethlehem and the river is zoned single-family residential and residential & agricultural, though the existing land use map shows some multi-family residential and rural residential uses.

River Use Conflicts and Issues

The Hudson River shipping channel is used commercially for access to the Port of Albany from points south; large vessels and tankers are not uncommon. Conflict arises between recreational boaters and the wakes created by large commercial boat traffic. Furthermore, large vessel wakes have caused damage to docks and bulkheads in the Town of Bethlehem. Erosion is a problem for sections of the concrete bulkhead within Henry Hudson Park. There are no known interferences with the existing navigation channel.

Although no discharging from vessels is allowed on this stretch of the Hudson, the water is not suitable for human contact. Heavy industries to the North, including tank farms and a power plant, have degraded water quality. Another contributing factor to degraded water quality is the Town's Storm Drainage System which discharges untreated water directly into the Hudson River. People of the town of Bethlehem have voiced a desire to make the Hudson River swimmable in this area and water quality should be improved. If the river is made safe for swimming, swimming areas will need to be created to promote public health and safety. Conflicts may arise with the operation of vessels near swimming areas.

Our research has shown that DEC states that the shipping channel and dredging spoils, among other contributing factors, have caused damage to the Streams and Kills that support a smallmouth bass population. Water withdrawal from the River during specific seasons affects the success of fish spawning and rearing.

While the South Harbor Sub-District is heavy industrial in nature and appearance, the redevelopment of the North Harbor Sub-District should be done so that no adverse impacts occur to the scenic quality of the Hudson River. While cleaner industrial uses are encouraged in this area, there is a lack of harbor infrastructure and commercial vessel support facilities within the Town of Bethlehem.

Public Ownership and Access

Currently, Henry Hudson Park is the only official public access available to the Hudson River, both for pedestrians and water-based recreation. The boat launch at Henry Hudson Park is open to the general public, while the park itself is designated for Town of Bethlehem residents. The recently acquired Town-owned property north of the U.S. Job Corps property does not currently have official public access to the riverfront. No public marinas or swimming facilities exist along the Bethlehem riverfront.

Underwater Ownership

New York State is sovereign owner of most lands under bodies of water within State borders. In 1992 the State Legislature passed a bill requiring permits for use of underwater lands for the “purposes of navigation, commerce, fishing, bathing, and recreation; environmental protection; and access to the navigable waters of the state”. Some lands under the Hudson have been conveyed to private upland owners and the State Office of General Services has provided the ownership of underwater lands within the Town of Bethlehem. As shown on the *Water Grant Index Maps* provided the Office of General Services on the following pages, ownership is divided among private and public entities.

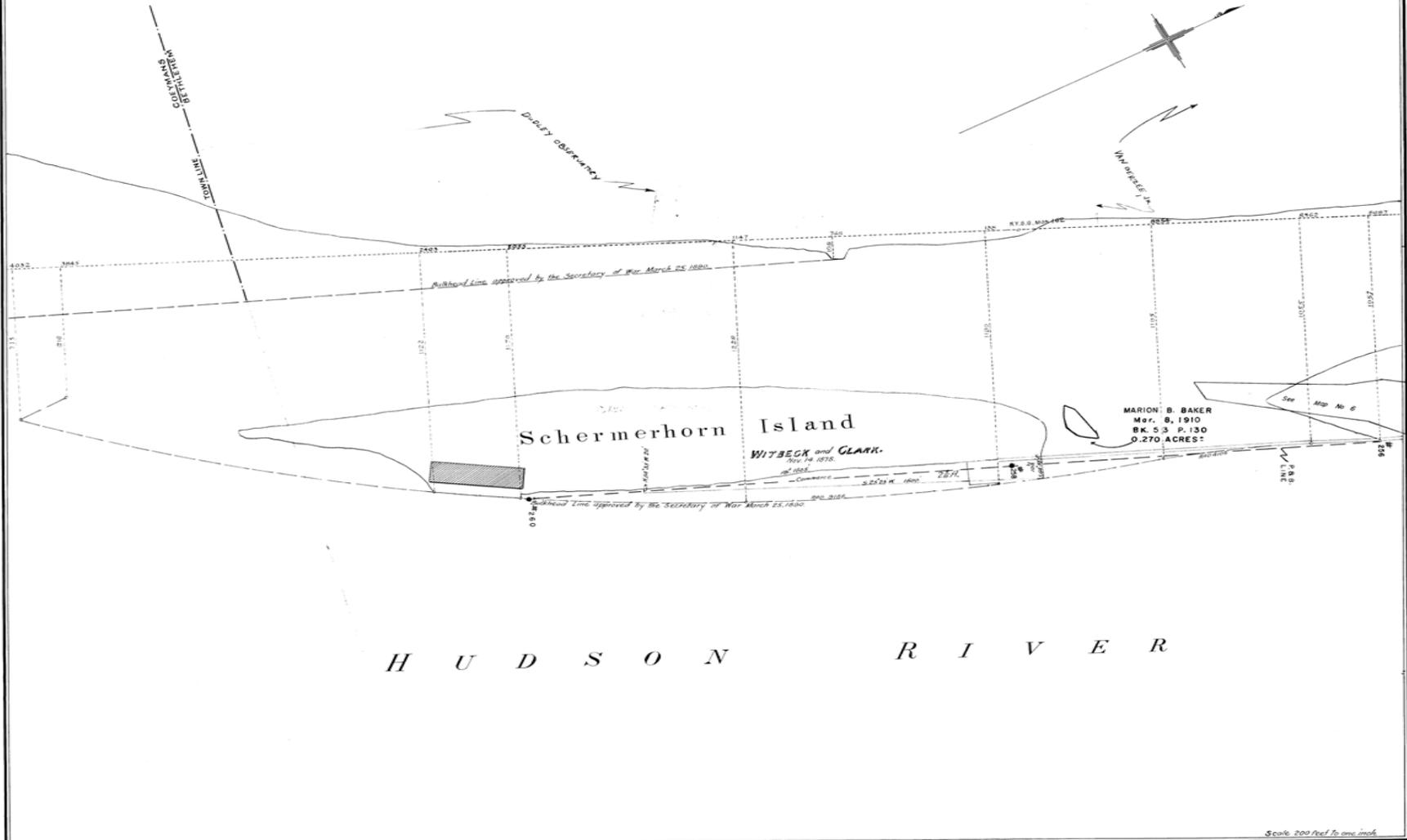
Existing Infrastructure and Underwater Utilities

The Federally regulated shipping channel stretches through the entire Bethlehem riverfront, though there is no harbor infrastructure and few commercial docks. There are two submerged oil/gas pipeline areas within the Bethlehem river channel, one southeast of Glenmont and the other at Bear Island. Please see *Riverfront Existing Conditions*. Overhead power cables cross the river near the Glenmont pipeline location. In the Cedar Hill/Vloman Kill area there is a submerged cable area crossing the river.

The Town of Bethlehem Dinmore Road Chlorination Station is located in proximity to the riverfront in the Vloman Kill area. This facility chlorinates untreated water taken from the Hudson River by the Town of Bethlehem. The Town’s Wastewater Treatment Plant, located in Cedar Hill, treats household wastewater and then discharges it into the Hudson River. The Storm Drainage System, which collects storm water runoff, discharges water directly into the Hudson River, untreated.

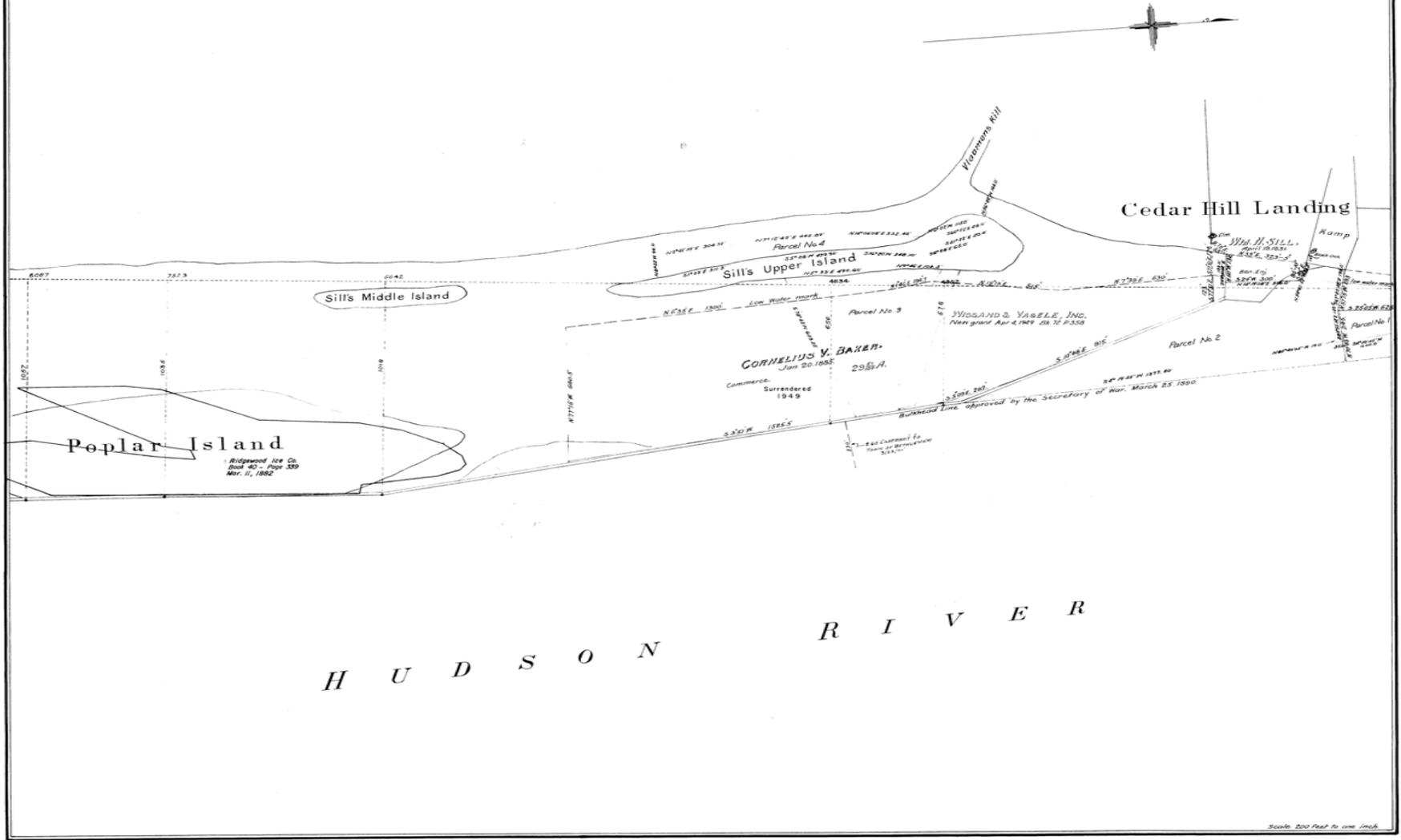
***New York State Office of General Services
Water Grant Index Maps***

B E T H L E H E M



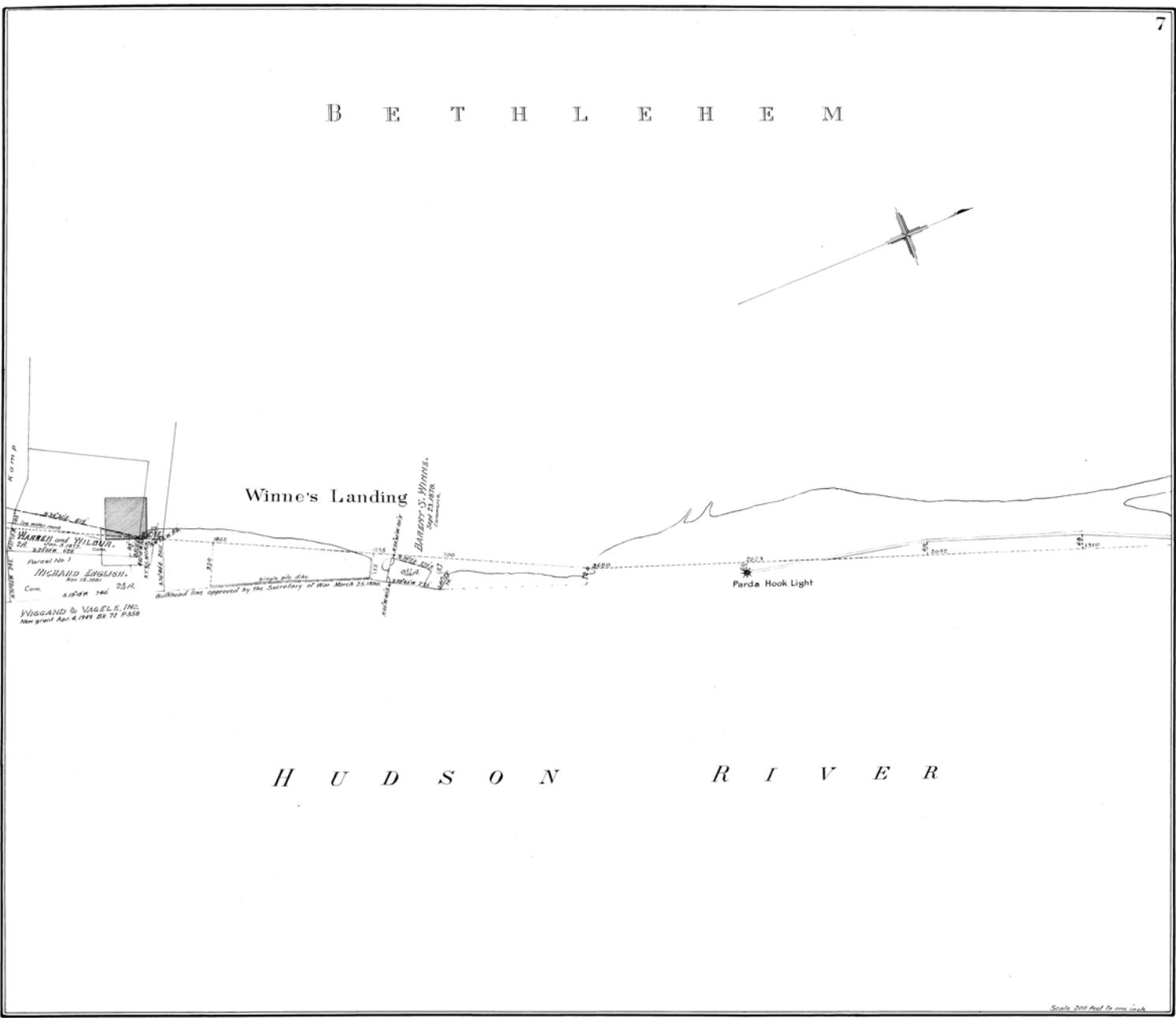
H U D S O N R I V E R

B E T H L E H E M



Scale 200 Feet to one inch. Albany County

B E T H L E H E M

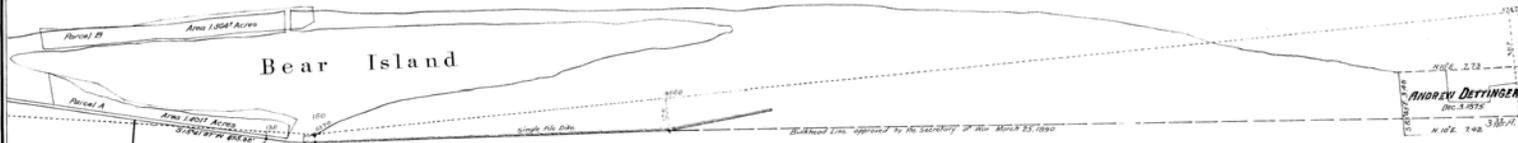


Scale: 200 Feet to one inch
Albany County

B E T H L E H E M



TENNESSEE GAS TRANSMISSION Co.
Charted Sept. 12, 1945. 400 70 P. 587



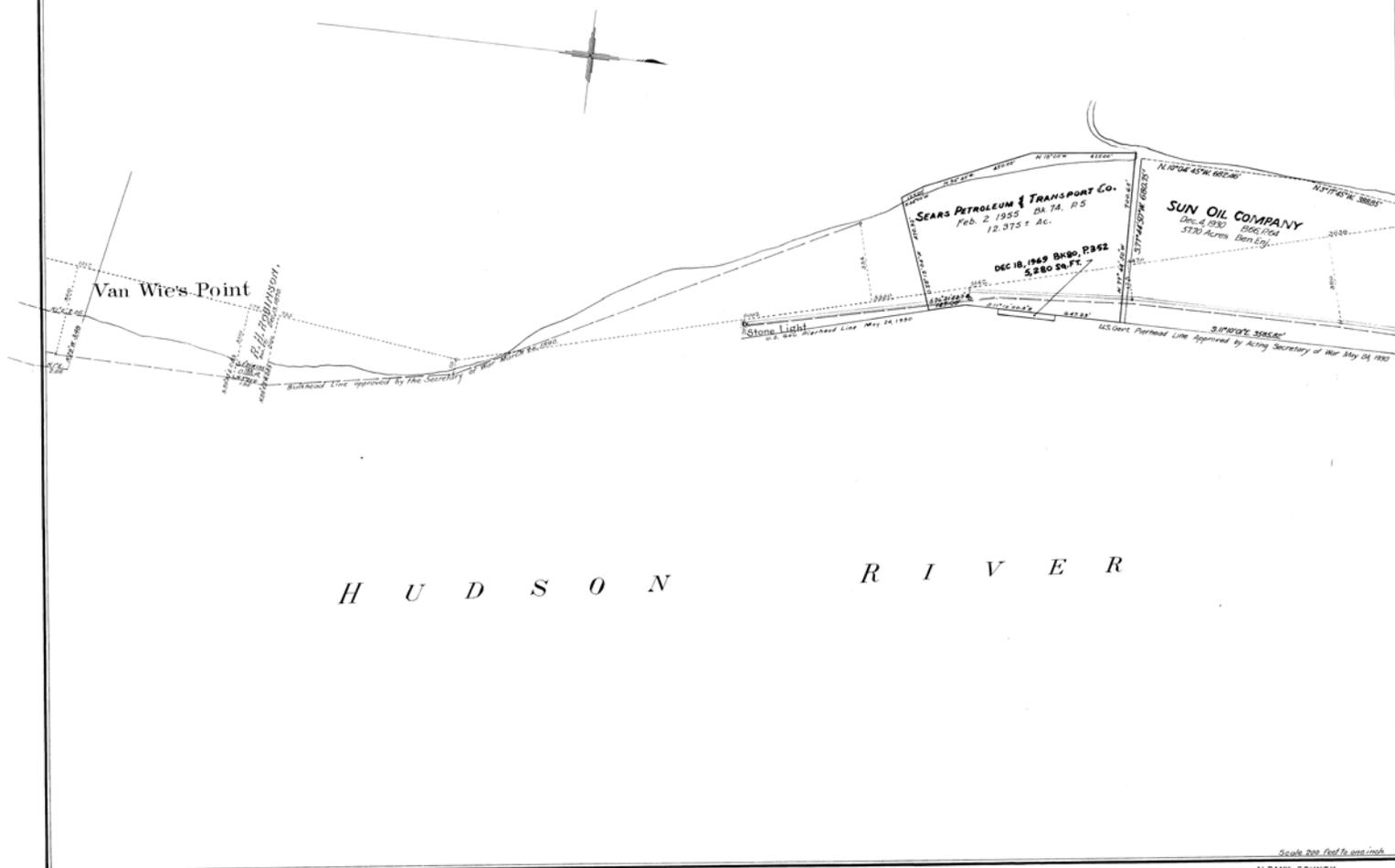
of 6011 Enclosed, attached to
Tennessee Gas Transmission Co. Dec. 11, 1953

H U D S O N R I V E R

Scale: 1000 feet to one inch

Albany County

B E T H L E H E M



H U D S O N R I V E R

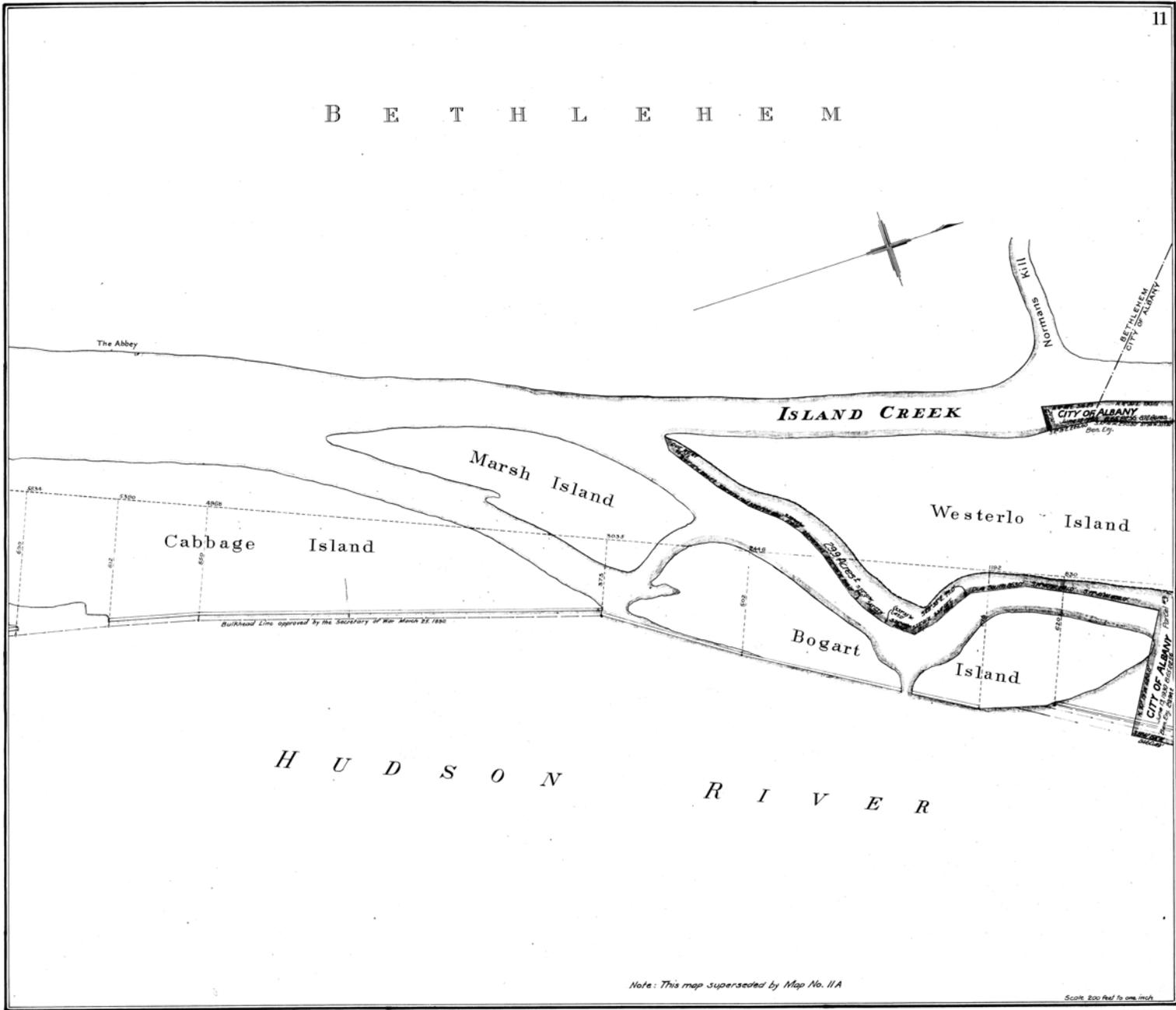
Scale: 1" = 100' ±
ALBANY COUNTY

B E T H L E H E M



Albany County

B E T H L E H E M



Note: This map superseded by Map No. 11A

Scale: 200 feet to one inch

Albany County

As noted previously, riverfront infrastructure includes the public boat launch at Henry Hudson Park. This boat launch does not include a fueling station, pump-out facilities or other boater services, but is accessible by town roads. The Town of Bethlehem has voiced a need for recreational boating services along the Hudson: dockage and commercial services. Residents have also voiced a need for a separate launch for non-motorized watercraft.

The shoreline at Henry Hudson Park has a variety of stabilization measures including a bulkhead, concrete, riprap, timber pilings, and a naturalized edge. Riverfront revitalization will require shoreline stabilization improvements and Henry Hudson Park improvements will require a reconstructed bulkhead.

A3. EXISTING AUTHORITIES

The Hudson River includes a variety of natural, historic, economic, and cultural resources. Several state and federal agencies have jurisdiction over the varied resources. As noted earlier New York State is sovereign owner of most underwater lands within its borders and many State agencies have responsibilities concerning the River. The New York State Division of Coastal Resources is assisting in the development of this LWRP and Harbor Management plan. The NYS Office of Parks, Recreation, and Historic Preservation and the New York State Department of Environmental Conservation maintain public boat launches throughout the Hudson River. The Town of Bethlehem boat launch, located in Henry Hudson Park, is operated in cooperation with the New York State Department of Environmental Conservation. The New York State Department of Environmental Conservation (DEC) Damage Assessment Unit assesses the cleanup of PCBs and the Hudson River federal Superfund Site. DEC Hudson River Fisheries Unit focuses on fish populations and habitat; these fisheries include American shad, river herring, striped bass, American eel, and Atlantic sturgeon. The Hudson River Valley Greenway supports voluntary cooperation between thirteen counties along the Hudson River, including Albany County and the Town of Bethlehem.

Federally, the U.S. Army Corps of Engineers has the responsibility of maintaining the shipping channel terminating at the Port of Albany; depth must be maintained at thirty-two feet.

A4. HARBOR MANAGEMENT PROGRAM

Opportunities

The northern end of the Bethlehem Riverfront is industrial in nature while the south is less-intensely used and increasingly in a natural state. From the Central Riverfront residential lots give way to natural and undeveloped areas of the Southern Riverfront. The LWRP is directing area development pressures into the Northern Riverfront District and the Riverfront Core of the Central Riverfront. Scenic, historic, and natural resources of the Southern Riverfront will be maintained and improved with additional public and educational access.

Many opportunities exist for the redevelopment and improvement of the Bethlehem Riverfront. These opportunities relate to building and economic development, accentuating and improving environmental features and habitats, increased public access to the riverfront, and maintaining scenic and aesthetic qualities. Areas for improvement include:

- > Redevelopment of the Bohl Excavation site in the Sub-Port Sub-District with design guidelines to improve the Gateway appearance
- > Redevelopment of vacant properties in the North Harbor Sub-District with “cleaner” industries
- > Redevelopment of properties in the South Harbor Sub-District with marine-based commercial and mixed-use activities and public access opportunities
- > Maintain and protect properties of scenic and natural significance in the South Riverfront
- > Decrease the amount of Bulkhead along the shoreline to aid in habitat restoration and conservation
- > Contiguous land with natural, scenic, and/or historic values throughout the Riverfront provide an opportunity for public access with a Greenway Trails System

Objectives

Use and activity along the Town of Bethlehem Riverfront will continue to grow as its facilities and surrounding conditions are improved, and publicized as such. With increased popularity, however, the competition and conflict between users will also increase, as each user demands additional space, ramp and dock access, environmental protection, or even noise control. These conflicts include recreational boaters and commercial vessels, water-based industries and water quality, and recreational or commercial uses of the riverfront and wildlife habitats. The objectives of this Harbor Management Plan include the following:

- > Maintaining the scenic qualities of the Riverfront and improving aesthetic qualities of the industrial areas and the Gateway
- > Maintaining the existing and recruiting new marine-based industries while providing necessary infrastructure for a marine-based economy
- > Continued and expanded public access to Riverfront including recreational boating
- > Provide a balance between the marine-based commercial uses and the recreational users of the River
- > Protecting and improving water quality by researching cleaner industrial, residential, and municipal discharge practices while collaborating with other Hudson River communities to improve water quality
- > Protecting and enhancing significant habitats along the Bethlehem Riverfront

Harbor Management Plan Map and Implementation

Implementation of the above objectives are listed in the following table. The *Harbor Management Plan Map* defines the zones, infrastructure types, and capital projects of the HMP.

Appendix B - Community Characteristics

Appendix B – COMMUNITY CHARACTERISTICS

This section outlines various characteristics of interest to the Waterfront Revitalization Area and the Town of Bethlehem. Community characteristics of interest include population, an age cohort profile, labor force and employment, income, and housing. For the purpose of this study, the WRA makes up the portion of the Town of Bethlehem bordered by I-87 to the west and the Hudson River to the east. This area is comprised of Census Tract 143.01 and roughly two-thirds of Census Block Group 9, which is located within Census Tract 142.01. In order to ensure demographic reliability, data was collected and analyzed from these designated U.S. Census boundaries.

The Waterfront Revitalization Area (WRA) is compared to the Town of Bethlehem in order to distinguish the area from the remainder of the Town. Both the WRA and the Town are compared to the City of Albany, Albany County, and other suburbs in the county including the Towns of Guilderland, New Scotland, and Coeymans. The Towns of East Greenbush and Schodack were also used to compare and contrast community characteristics with the WRA and the Town of Bethlehem. Although these two municipalities are located across the waterfront in Rensselaer County, the comparison to the WRA and the Town of Bethlehem allows for an analysis of communities with similar natural resources.

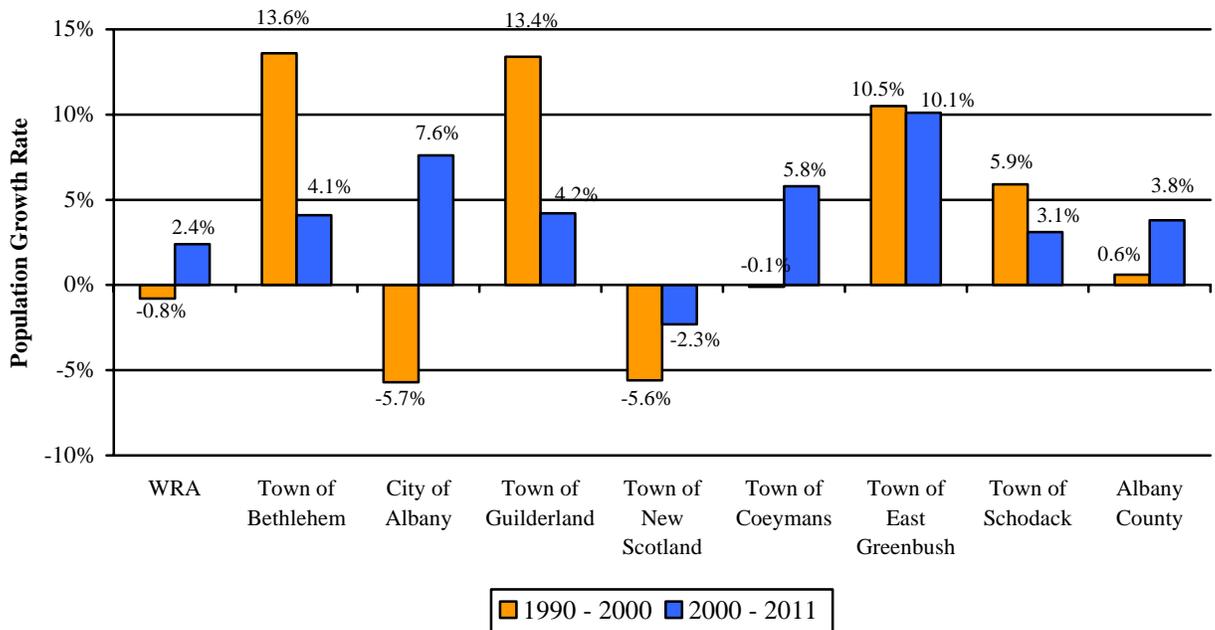
Population

As seen in the accompanying charts, population in the Town of Bethlehem has increased by 13.6% between 1990 and 2000, and is projected to increase an additional 4.1% between 2000 and 2011. The population growth that the Town has experienced is reflective of the desirable characteristics and revered quality of life in Bethlehem. This growth is parallel to the Town of Guilderland and East Greenbush. Along with Bethlehem, these two towns are the fastest growing suburbs under study. The growth seen in the Town contrasts sharply with what has occurred in other subsets of the region, including the WRA. Whereas the Town of Bethlehem saw extreme growth, the WRA actually decreased in population between 1990 and 2000, and is projected to increase only slightly between 2000 and 2011. Although growth was evident between 2000 and 2006, both the WRA and the Town are expected to slightly decrease in population over the next five years. The City of Albany has experienced substantial population decline over the 1990s, and only now is beginning to reverse the trend. Likewise, Albany County has seen only minimal growth between 1990 and 2000, and the population is projected to slightly increase over the next decade.

Population Trends: 1990 – 2011							
<i>(Source: U.S. Census Bureau; Easidemographics)</i>							
	1990	2000	2006 (Estimate)	2011 (Projection)	Change 1990-2000	Est. Change 2000-2006	Proj. Change 2006-2011
Waterfront Revitalization Area (WRA)	3,392	3,364	3,487	3,446	-0.8%	3.7%	-1.2%
Census Tract 143.01	2,857	2,680	2,717	2,663	-6.2%	1.4%	-2.0%
Portion of Census	535	684	770	783	27.9%	12.5%	1.7%

Population Trends: 1990 – 2011							
(Source: U.S. Census Bureau; Easidemographics)							
Block Group 9							
Town of Bethlehem	27,552	31,304	33,906	32,585	13.6%	8.3%	-3.9%
City of Albany	100,031	94,301	95,141	101,440	-5.7%	0.9%	6.6%
Town of Guilderland	30,011	34,045	35,318	35,481	13.4%	3.7%	0.5%
Town of New Scotland	9,139	8,626	8,316	8,424	-5.6%	-3.6%	1.3%
Town of Coeymans	8,158	8,151	8,418	8,625	-0.1%	3.3%	2.5%
Town of East Greenbush	14,076	15,560	16,756	17,124	10.5%	7.7%	2.2%
Town of Schodack	11,839	12,536	12,943	12,928	5.9%	3.2%	-0.1%
Albany County	292,793	294,565	300,112	305,719	0.6%	1.9%	1.9%

Change in Population: 1990 - 2011
(Source: U.S. Census Bureau; Easidemographics)



Households

The number of households in both the WRA and the Town of Bethlehem is reflective of the population trends seen between 1990 and 2000, and the projections through 2011. Following suit with the population decrease of 0.8%, the number of households has decreased by 0.9% over the 1990s. However, the number of households is projected to increase three times as much as the population increase projected between 2000 and 2011. This could be attributed to the large number of younger single and two-person households in the WRA*. Not surprisingly, the change in the number of

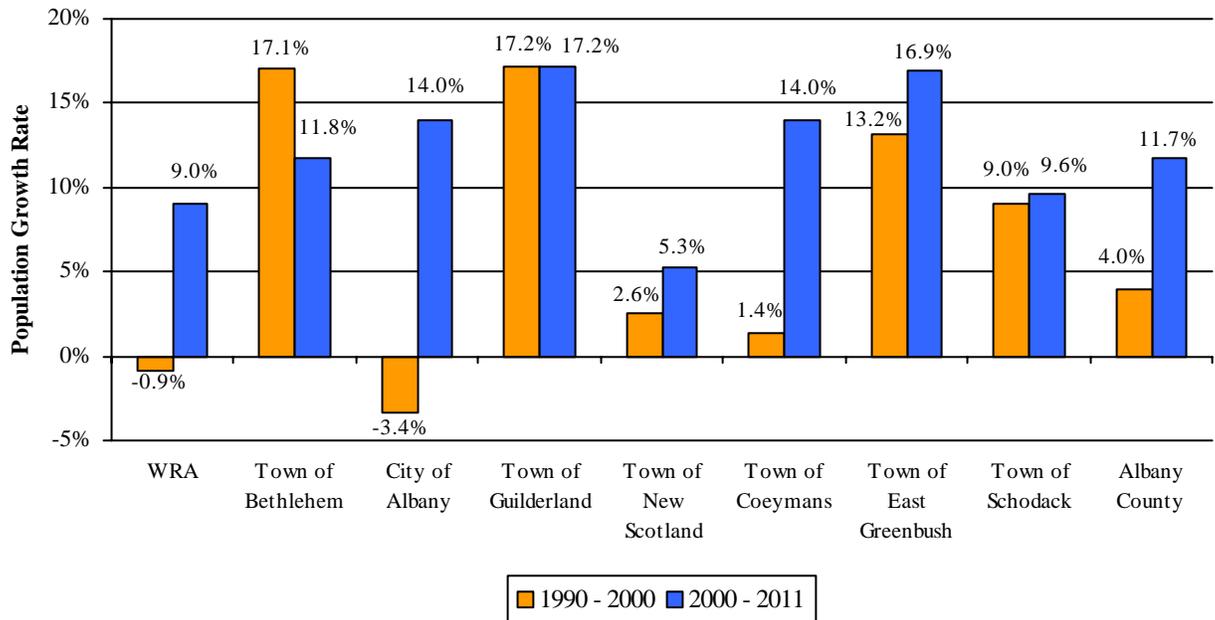
households coincides with the population changes in each study area, with the exception of the Town of New Scotland.

Number of Households: 1990 – 2011							
(Source: U.S. Census Bureau; Easidemographics)							
	1990	2000	2006 (Estimate)	2011 (Projection)	Change 1990-2000	Est. Change 2000-2006	Proj. Change 2006-2011
Waterfront Revitalization Area (WRA)	1,170	1,159	1,264	1,263	-0.9%	9.0%	-0.1%
Census Tract 143.01	942	910	968	955	-3.4%	6.4%	-1.3%
Portion of Census Block Group 9	228	249	296	308	9.2%	18.8%	3.8%
Town of Bethlehem	10,341	12,112	13,827	13,542	17.1%	14.2%	-2.1%
City of Albany	42,121	40,709	42,642	46,413	-3.4%	4.7%	8.8%
Town of Guilderland	11,450	13,422	15,301	15,737	17.2%	14.0%	2.8%
Town of New Scotland	3,256	3,341	3,402	3,519	2.6%	1.8%	3.4%
Town of Coeymans	3,078	3,121	3,409	3,559	1.4%	9.2%	4.4%
Town of East Greenbush	5,375	6,084	6,831	7,115	13.2%	12.3%	4.2%
Town of Schodack	4,343	4,735	5,101	5,189	9.0%	7.7%	1.7%
Albany County	115,824	120,512	129,401	134,568	4.0%	7.4%	4.0%

* During the projection period 2000 to 20011, the first ten years of the baby-boomer cohort retirees, swelling the ranks of the empty-nesters and seniors (ages 55-65), by 20011.

Change in Number of Households: 1990 - 2011

(Source: U.S. Census Bureau; Easidemographics)



Age Cohort Profile

The population can be broken down into cohorts or groups, by age. An analysis of these age cohorts is an important component in determining the demographic profile of the geographic divisions under study. Following typical age cohort profiles, Baby Boomers are those born from 1946 to 1964. Those that belong to Generation X were born from 1965 to 1976, while the Generation Y or Echo Boomers were born from 1977 to 1994. As the decade moves on, these age cohorts mature and take on the characteristics of older generations, therefore changing the population trends and needs over time. As a result of these population adjustments, age cohorts help determine the types of development that a community might require to adapt to future changes in age-based needs.

For purposes of this study, age cohort profiles will be examined based on the following classifications:

- > Pre-school: less than 6 years old
- > School Age: 6 to 17 years old
- > College Age: 18 to 24 years old
- > Young Working Adults: 25 to 34 years old
- > Mid – Life: 35 to 54 years old
- > Empty Nesters: 55 to 64 years old
- > Seniors: 65+ years old

When compared to surrounding municipalities, the Town of Bethlehem has an abundance of pre-school and school age children, who comprise approximately 8.2% and 19.5% of the Town respectively. The percentage of college age and young working adults are low when compared to the region (however, the region also hosts numerous colleges and universities, while Bethlehem has none), and the percentage of mid – lifers and empty nesters are on par with regional trends. There exists a relatively larger percentage of seniors when compared to neighboring jurisdictions and Albany County: 14.1% of the Town are aged 65 years or older. This aging baby boomer cohort will need retiree services if they are expected to be retained in the area.

On the other hand, the WRA has a rather large school age, college age and working adult population. There exist less pre-school, mid – lifers, empty nesters and seniors in the WRA than the Town. The large percentage of school age, college age and young working adults in the WRA provide target market niches that influence the type of planning that may be necessary along the waterfront.

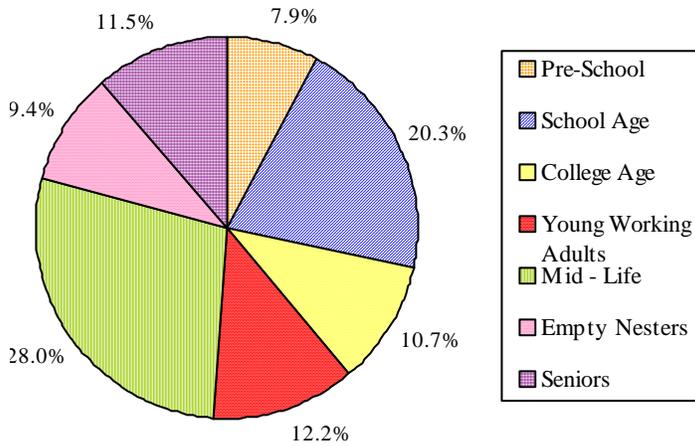
Population Distribution by Age Cohort: 2006 (Source: Easidemographics)		
	Waterfront Revitalization Area	Town of Bethlehem
Pre-School	276	2,766
School Age	707	6,624
College Age	374	1,826
Young Working Adult	424	3,213
Mid-Life	975	11,459
Empty Nesters	327	3,245
Seniors	402	4,773

Age Cohort Profile: 2006 (Source: Easidemographics)							
	Pre-School	School Age	College Age	Young Working Adult	Mid-Life	Empty Nesters	Seniors
Waterfront Revitalization Area (WRA)	7.9%	20.3%	10.7%	12.2%	28.0%	9.4%	11.5%
Census Tract 143.01	7.1%	20.0%	12.0%	11.9%	27.0%	10.0%	12.0%
Portion of Census Block Group 9	10.8%	21.4%	6.3%	13.0%	31.5%	7.2%	9.8%
Town of Bethlehem	8.2%	19.5%	5.4%	9.5%	33.8%	9.6%	14.1%
City of Albany	6.7%	13.0%	20.3%	15.2%	24.3%	7.5%	13.0%
Town of Guilderland	7.0%	17.1%	6.4%	12.6%	34.2%	10.0%	12.7%
Town of New Scotland	7.0%	17.9%	6.1%	9.0%	34.1%	13.1%	12.8%
Town of Coeymans	8.5%	19.2%	8.3%	12.5%	30.7%	9.2%	11.4%
Town of East Greenbush	7.2%	16.9%	6.8%	11.7%	33.4%	10.5%	13.5%
Town of Schodack	7.3%	18.9%	6.3%	11.0%	32.6%	11.2%	12.7%
Albany County	7.0%	15.6%	11.9%	12.7%	29.4%	9.3%	14.0%

Age Cohort Profile, Waterfront Revitalization

Area: 2006

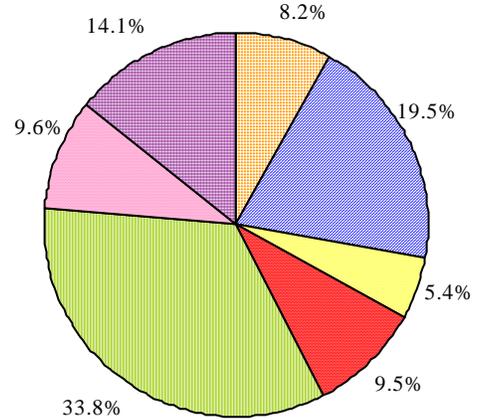
(Source: Easidemographics)



Age Cohort Profile, Town of Bethlehem:

2006

(Source: Easidemographics)



Labor Force and Employment

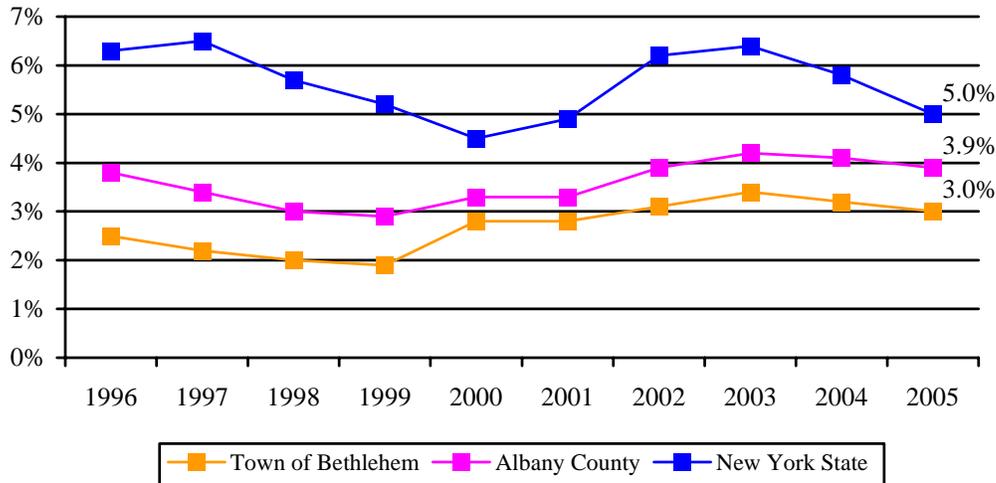
Labor force participation rates are a reflection of the current economic state of a community. The Town of Bethlehem has a lower percentage of working age population than both Albany County and New York State. This is indicative of the large percentage of the portions of the population that are not working age. Regardless of the smaller working age population, however, the Town’s population in the labor force is higher than both the County and the State. This higher labor force participation could be attributed to high employment rates, which are a positive sign for any development project. Such rates indicate more local wealth and a bigger tax base for the local community.

Employment Statistics: 2005		
(Source: New York State Department of Labor)		
	Working Age Population as % of Total Population	Population in Labor Force as % of Working Age Population
Town of Bethlehem	75.7%	66.2%
Albany County	80.1%	61.8%
New York State	78.2%	57.1%

According to New York State Department of Labor, the Town of Bethlehem had an unemployment rate of only 3.0% in 2005. This is considerably lower than both the County and the State’s unemployment rate of 3.9% and 5.0% respectively. These low unemployment rates are indicative of a prospering economy, where the employment gaps have already been filled. However, it is important to note that if the rate is too low, potential employers may be hesitant to locate their business without a large employment base in place.

Unemployment Rate Trend: 1996 - 2005

(Source: New York State Department of Labor)



Income Characteristics

The WRA's median household income is approximately 20% lower than the average household income. Likewise, the Town's median household income is approximately 21% lower than their average household income. This indicates that there are numerous households within both the WRA and the Town with higher income levels, thus skewing the figures to reflect the income gap. The per capita income for the WRA is estimated at \$26,241, which is approximately 28% lower than the Town's per capita income of \$36,657. This per capita income within the WRA is lower than the Town, County and State.

Income Characteristics ¹ : 2000 – 2006								
(Source: Easidemographics; CPI Inflation Calculator)								
	Waterfront Revitalization Area		Town of Bethlehem		Albany County		New York State	
	2000*	2006	2000*	2006	2000*	2006	2000*	2006
Median Household Income	\$48,643	\$56,544	\$74,027	\$71,068	\$50,315	\$49,657	\$50,852	\$47,964
Average Household Income	\$51,583	\$70,604	\$94,302	\$89,888	\$65,605	\$64,729	\$72,489	\$68,650
Per Capita Income	\$19,983	\$26,241	\$36,905	\$36,657	\$27,358	\$27,910	\$27,409	\$26,418
*Note: Income Characteristics for year 2000 have been adjusted for inflation to reflect equivalent of year 2006 dollars								

¹ Income Characteristics for the Waterfront Revitalization Area were not available at the block group level in the 2000 Census. Therefore, the figures represent income characteristics for Census Tract 143.01 only, rather than an average of the entire Waterfront Revitalization Area.

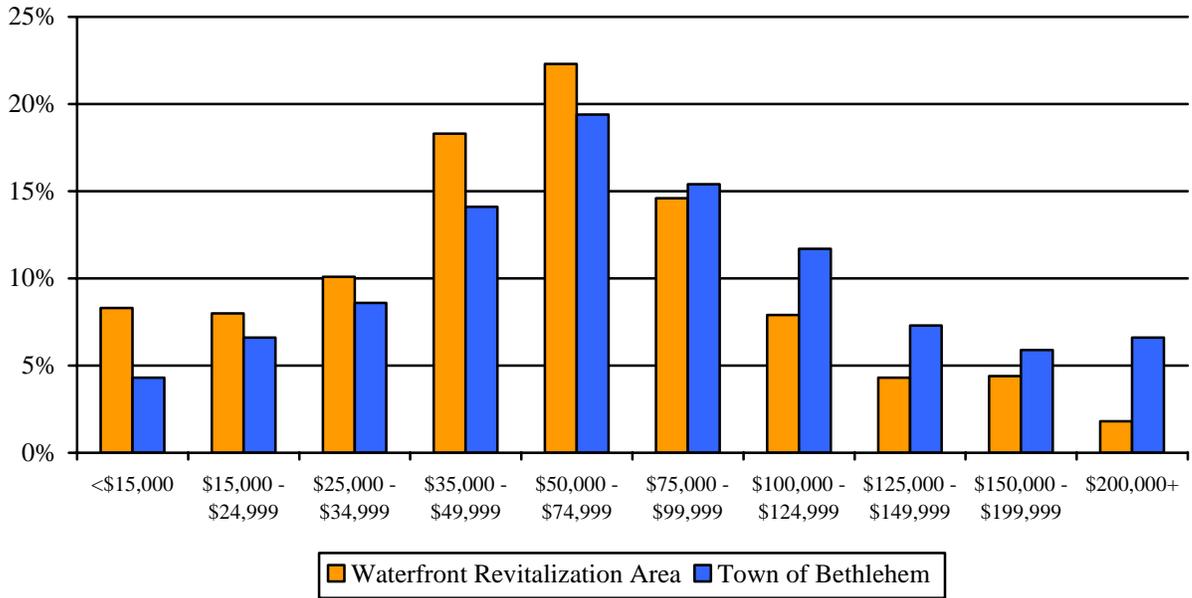
A distribution of the household incomes within the WRA, Town, County and State reflects similar income characteristics. A mere 4.3% of households within the Town, and 8.3% of households within the WRA have incomes less than \$15,000. These figures are much lower than both Albany County and New York State. Approximately two-thirds of all households within the Town have incomes in excess of \$50,000. This compares to 55.3% in the WRA, 49.7% in Albany County and 48.2% in New York State. This reflects the esteemed quality of life and affluence that is present in the Town.

Comparison of Household Income Distribution: 2006				
(Source: Easidemographics)				
	Waterfront Revitalization Area	Town of Bethlehem	Albany County	New York State
<\$15,000	8.3%	4.3%	13.7%	16.5%
\$15,000 - \$24,999	8.0%	6.6%	10.3%	10.7%
\$25,000 - \$34,999	10.1%	8.6%	11.2%	10.6%
\$35,000 - \$49,999	18.3%	14.1%	15.1%	14.1%
\$50,000 - \$74,999	22.3%	19.4%	19.3%	17.8%
\$75,000 - \$99,999	14.6%	15.4%	12.7%	11.5%
\$100,000 - \$124,999	7.9%	11.7%	7.4%	7.0%
\$125,000 - \$149,999	4.3%	7.3%	4.1%	4.1%
\$150,000 - \$199,999	4.4%	5.9%	3.2%	3.5%
\$200,000+	1.8%	6.6%	3.0%	4.3%

As seen in the accompanying charts, household income is slightly more normally distributed in the Town of Bethlehem than in the Waterfront Revitalization Area. The slightly skewed distribution toward the lower income levels reinforces the finding that household income in the WRA is slightly lower than that of the Town.

Household Income Distribution: 2006

(Source: Easidemographics)

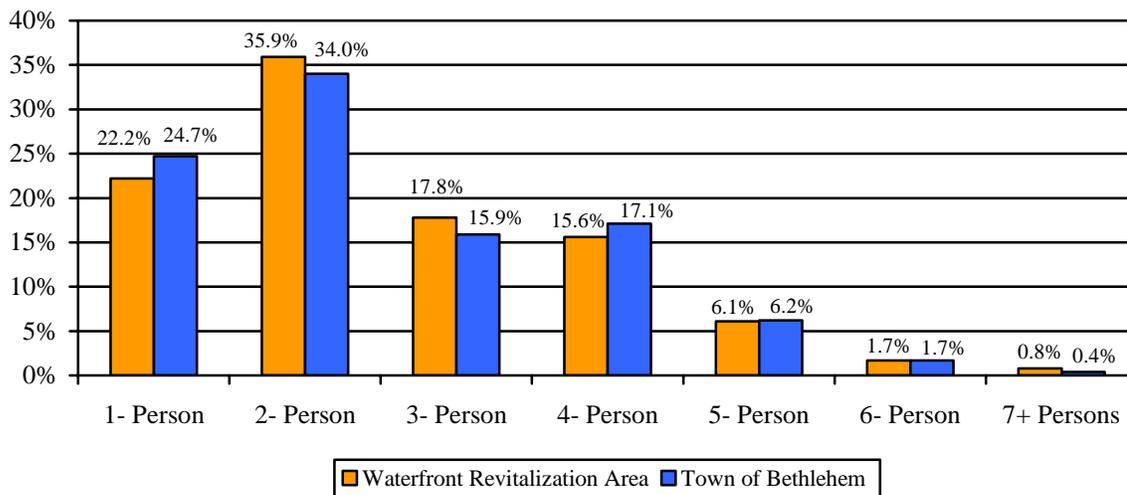


Housing Characteristics

As seen in the chart below, the distribution of persons per household in the WRA is akin to the distribution within the Town. Two-person households are the predominant type of household in each study area, comprising 35.9% of all households in the WRA, and 34.0% of all households in the Town. The WRA has slightly more two and three-person households and households with seven or more persons, while the Town has a greater share of single-person, four-person, and five-person households. This could be attributed to the age cohorts that are prevalent in each study area, with the WRA tending to have a greater percentage of younger families and college students, and the Town a greater percentage of older cohorts.

Number of Persons per Household: 2006

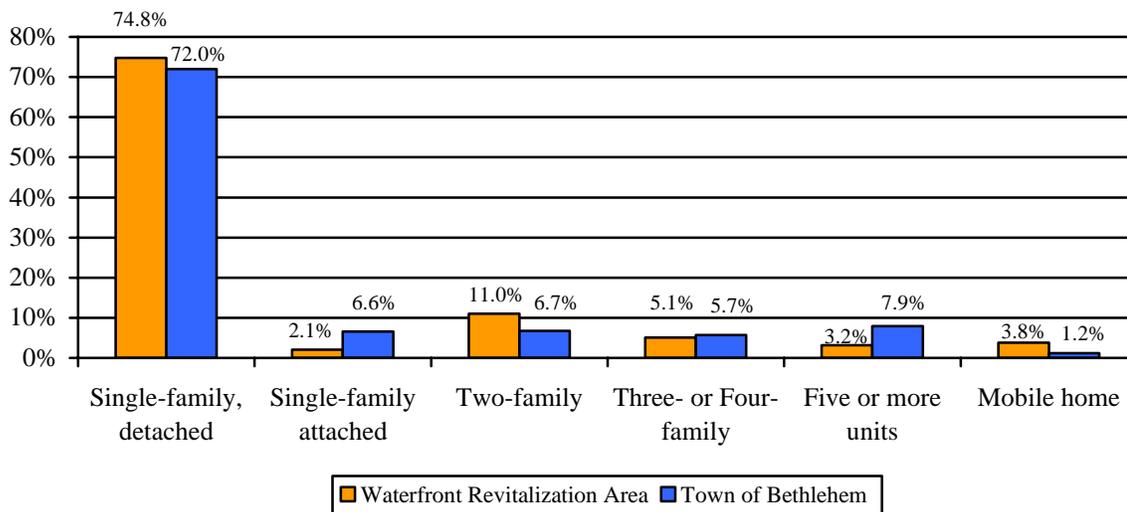
(Source: Easidemographics)



Town-wide trends indicate that 74.8% of all housing units in the WRA, and 72.0% of all housing units in Bethlehem are single-family detached homes. Approximately 19.3% of the WRA’s housing, and 20.3% of the Town’s housing is multi-family with two or more units, whereas 3.8% of the WRA, and 1.2% of all units in the Town are mobile homes.

Housing Type: 2006

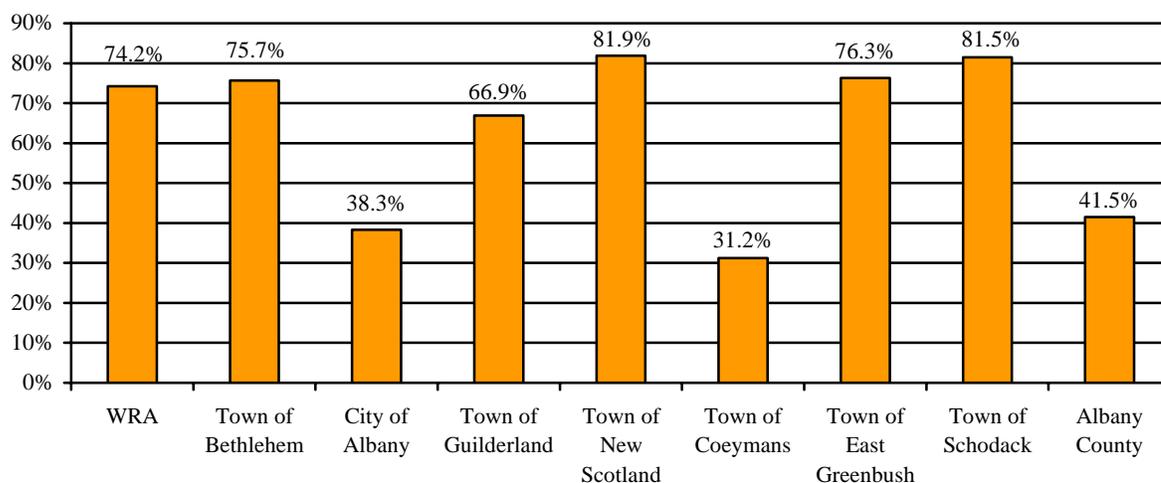
(Source: Easidemographics)



Approximately 97.8% of all housing units within the Town, and 97.4% in the WRA are occupied. There exist 307 vacant units in the Town, of which 24.4% of all vacancies are for rent, 22.1% are for sale, and the remaining 53.4% are seasonal or other types of vacant units. The WRA is comprised of 38 vacant units, all of which are seasonal or another type of vacancy. It is estimated that 75.7% of all occupied units in the Town, and 74.2% in the WRA are owner-occupied, which is on par with other municipalities in the region, with the exception of the City of Albany and the Town of Coeymans who have much lower owner – occupancy rates.

Owner-Occupancy Rate: 2006

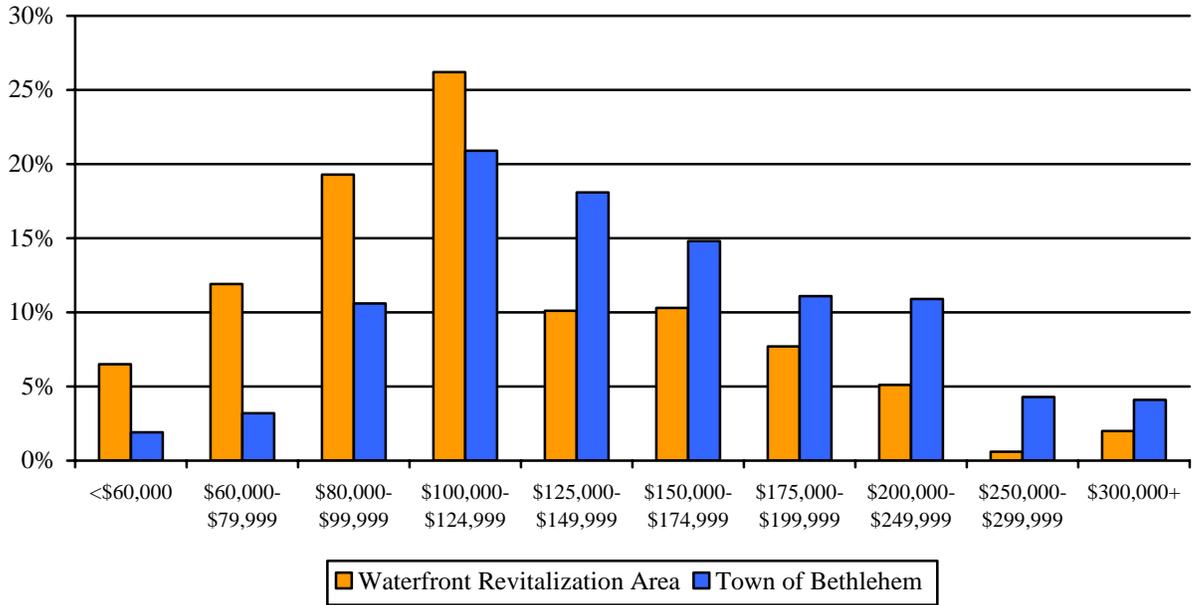
(Source: Easidemographics)



The following charts depict the distribution of owner-occupied housing values in the WRA and the Town and median housing values in the WRA and the Town compared to those of surrounding municipalities and the county. The distribution of owner-occupied housing values is consistent with the income distribution seen within the WRA and the Town of Bethlehem. The distribution is skewed to the left, indicating that the housing in the WRA is cheaper than the housing in the Town on the whole. As such, the median housing value in the WRA is 12.8% less, or \$18,000 less than that of the Town. The Town of Bethlehem has the highest owner-occupied housing values of all areas in study, and the WRA is third highest, with the Town of Guilderland’s housing values falling between those of the Town of Bethlehem and the WRA.

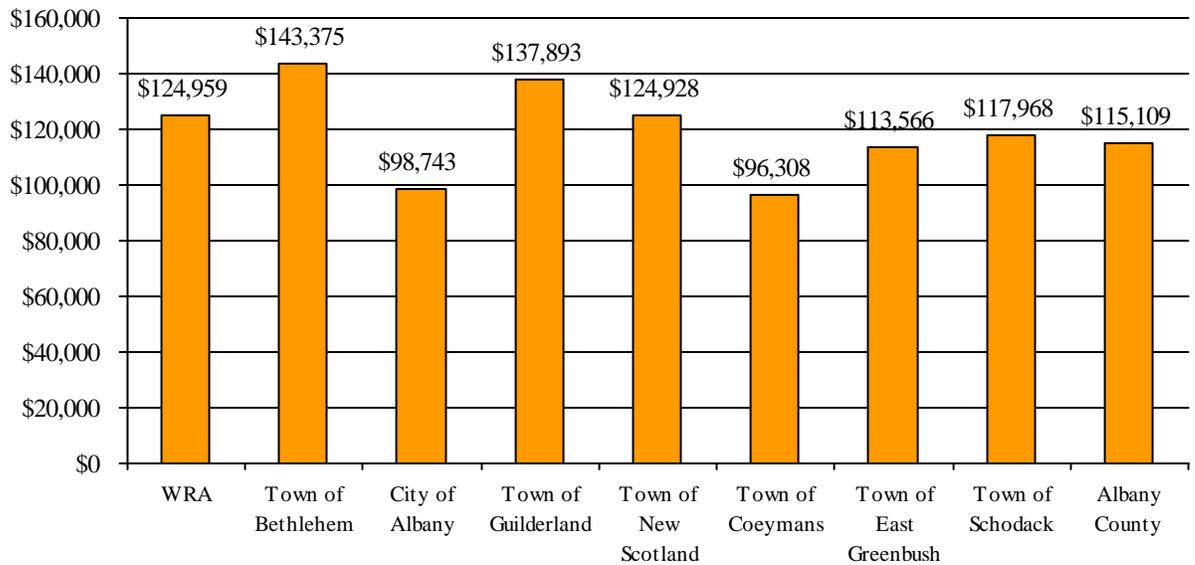
Distribution of Owner-Occupied Housing Values: 2006

(Source: U.S. Census Bureau; Easidemographics)



Median Owner-Occupied Home Values: 2006

(Source: U.S. Census Bureau; Easidemographics)



The U.S. Census Bureau tracks the year housing units were built, which helps gauge the age of the housing stock in a given locale.² Although more housing units were built throughout the Town in the last seven years than in any other decade, there still exists a large percentage of homes that were built prior to 1939. This is especially true within the WRA; over 24.1% of all housing units were constructed before 1939. This is reflective of the historical sections of the Town, where growth was seen in the 19th and early parts of the 20th centuries. Regardless of this growth, however, the median³ age of the housing stock in both the WRA and the remainder of the Town is much younger than that of the surrounding municipalities and Albany County (with the exception of the Town of New Scotland and East Greenbush). The relatively older housing stock found in the WRA is reflected in the lower housing values, and thus the younger and less-established age cohorts that are prevalent in this area of the Town.

Year Housing Units Built, Town of Bethlehem: 2006				
(Source: Easidemographics)				
Year Built	Waterfront Revitalization Area		Town of Bethlehem	
	Number of Units	Percentage of Total	Number of Units	Percentage of Total
1999 or later	151	11.6%	2,528	17.9%
1995 to 1998	67	5.1%	752	5.3%
1990 to 1994	58	4.4%	1,026	7.3%
1980 to 1989	99	7.6%	1,645	11.6%
1970 to 1979	85	6.5%	1,483	10.5%
1960 to 1969	166	12.7%	1,610	11.4%
1950 to 1959	275	21.1%	1,907	13.5%
1940 to 1949	90	6.9%	1,080	7.6%
1939 or earlier	315	24.1%	2,103	14.9%

Median Year Built: 2006	
(Source: Easidemographics)	
Waterfront Revitalization Area	1965
Town of Bethlehem	1971
City of Albany	1941
Town of Guilderland	1977
Town of New Scotland	1963
Town of East Greenbush	1971
Town of Schodack	1965
Town of Coeymans	1963
Albany County	1958

² The U.S. Census relies on their survey and interview respondents to report the year structures were built. Therefore, data are susceptible to errors of response and nonreporting since respondents must rely on memory or other estimates by people who have lived in the neighborhood a long time.

³ Median indicates a value in an ordered set of values below and above which there is an equal number of values. In the case of the Town of Bethlehem: half of the housing units were built before 1971 and half were built after 1971.

Appendix C - Focus Group Meeting Notes

Provided upon request.

Appendix D - Public Meeting Notes

Provided upon request.

**Appendix E -
DRAFT Definitions
and Local Consistency Law**

**TOWN OF BETHLEHEM
DRAFT WATERFRONT CONSISTENCY REVIEW LAW**

Be it enacted by the Town Board of the Town of Bethlehem follows:

GENERAL PROVISIONS

I. Title.

This Local law will be known as the Town of Bethlehem Waterfront Consistency Review Law.

II. Authority and Purpose.

- A. This local law is adopted under the authority of the Municipal Home Rule Law and the Waterfront Revitalization of Coastal Areas and Inland Waterways Act of the State of New York (Article 42 of the Executive Law).
- B. The purpose of this local law is to provide a framework for agencies of the Town of Bethlehem to incorporate the policies and purposes contained in the Town of Bethlehem Local Waterfront Revitalization Program (LWRP) when reviewing applications for actions or direct agency actions within the coastal area; and to assure that such actions and direct actions by Town agencies are consistent with the LWRP policies and purposes.
- C. It is the intention of the Town of Bethlehem that the preservation, enhancement and utilization of the unique coastal area of the Town take place in a coordinated and comprehensive manner to ensure a proper balance between protection of natural resources and the need to accommodate limited population growth and economic development. Accordingly, this local law is intended to achieve such a balance, permitting the beneficial use of coastal resources while preventing loss and degradation of living coastal resources and wildlife; diminution of open space areas or public access to the waterfront; disruption of natural coastal processes; impairment of scenic, cultural or historical resources; losses due to flooding, erosion and sedimentation; impairment of water quality; or permanent adverse changes to ecological systems.
- D. The substantive provisions of this local law shall only apply when there is in existence a Town of Bethlehem Local Waterfront Revitalization Program which has been adopted in accordance with Article 42 of the Executive Law of the State of New York.

III. Definitions.

- A. "Actions" include all the following, except minor actions:
 - 1. projects or physical activities, such as construction or any other activities that may affect natural, manmade or other resources in the coastal area or the environment by changing the use, appearance or condition of any resource or structure, that:
 - i. are directly undertaken by an agency; or
 - ii. involve funding by an agency; or

- iii. require one or more new or modified approvals, permits, or review from an agency or agencies;
 - 2. agency planning and policymaking activities that may affect the environment and commit the agency to a definite course of future decisions;
 - 3. adoption of agency rules, regulations and procedures, including local laws, codes, ordinances, executive orders and resolutions that may affect coastal resources or the environment; and
 - 4. any combination of the above.
- B. "Agency" means any board, agency, department, office, other body, or officer of the Town of Bethlehem.
- C. "Coastal area" means that portion of New York State coastal waters and adjacent shorelands as defined in Article 42 of the Executive Law which is located within the boundaries of the Town of Bethlehem, as shown on the coastal area map on file in the office of the Secretary of State and as delineated in the Town of Bethlehem Local Waterfront Revitalization Program (LWRP).
- D. "Coastal Assessment Form (CAF)" means the form, a sample of which is appended to this local law, used by an agency to assist in determining the consistency of an action with the Local Waterfront Revitalization Program.
- E. "Consistent" means that the action will fully comply with the LWRP policy standards, conditions and objectives and, whenever practicable, will advance one or more of them.
- F. "Direct Actions" mean actions planned and proposed for implementation by an agency, such as, but not limited to a capital project, rule making, procedure making and policy making.
- G. "Environment" means all conditions, circumstances and influences surrounding and affecting the development of living organisms or other resources in the coastal area.
- H. "Local Waterfront Revitalization Program" or "LWRP" means the Local Waterfront Revitalization Program of the Town of Bethlehem, approved by the Secretary of State pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Executive Law, Article 42), a copy of which is on file in the Office of the Clerk of the Town of Bethlehem.
- I. "Minor actions" include the following actions, which are not subject to review under this chapter:
 - 1. maintenance or repair involving no substantial changes in an existing structure or facility;
 - 2. replacement, rehabilitation or reconstruction of a structure or facility, in kind, on the same site, including upgrading buildings to meet building or fire codes, except for structures in areas designated by the Coastal Erosion Hazard Area (CEHA) law where structures may not be replaced, rehabilitated or reconstructed without a permit;
 - 3. repaving or widening of existing paved highways not involving the addition of new travel lanes;
 - 4. street openings and right-of-way openings for the purpose of repair or maintenance of existing utility facilities;
 - 5. maintenance of existing landscaping or natural growth, except where threatened or endangered species of plants or animals are affected, or within Significant Coastal Fish and Wildlife Habitat areas;

6. granting of individual setback and lot line variances, except in relation to a regulated natural feature, a bulkhead or other shoreline defense structure;
7. minor temporary uses of land having negligible or no permanent impact on coastal resources or the environment;
8. installation of traffic control devices on existing streets, roads and highways;
9. mapping of existing roads, streets, highways, natural resources, land uses and ownership patterns;
10. information collection including basic data collection and research, water quality and pollution studies, traffic counts, engineering studies, surveys, subsurface investigations and soils studies that do not commit the agency to undertake, fund or approve any action;
11. official acts of a ministerial nature involving no exercise of discretion, including building where issuance is predicated solely on the applicant's compliance or noncompliance with the relevant local building code.
12. routine or continuing agency administration and management, not including new programs or major reordering of priorities that may affect the environment;
13. conducting concurrent environmental, engineering, economic, feasibility and other studies and preliminary planning and budgetary processes necessary to the formulation of a proposal for action, provided those activities do not commit the agency to commence, engage in or approve such action;
14. collective bargaining activities;
15. investments by or on behalf of agencies or pension or retirement systems, or refinancing existing debt;
16. inspections and licensing activities relating to the qualifications of individuals or businesses to engage in their business or profession;
17. purchase or sale of furnishings, equipment or supplies, including surplus government property, other than the following: land, radioactive material, pesticides, herbicides, storage of road de-icing substances, or other hazardous materials;
18. adoption of regulations, policies, procedures and local legislative decisions in connection with any action on this list;
19. engaging in review of any part of an application to determine compliance with technical requirements, provided that no such determination entitles or permits the project sponsor to commence the action unless and until all requirements of this Part have been fulfilled;
20. civil or criminal enforcement proceedings, whether administrative or judicial, including a particular course of action specifically required to be undertaken pursuant to a judgment or order, or the exercise of prosecutorial discretion;
21. adoption of a moratorium on land development or construction;
22. interpreting an existing code, rule or regulation;
23. designation of local landmarks or their inclusion within historic districts;
24. emergency actions that are immediately necessary on a limited and temporary basis for the protection or preservation of life, health, property or natural resources, provided that such actions are directly related to the emergency and are performed to cause the least change or disturbance, practicable under the circumstances, to coastal resources or the environment. Any decision to fund, approve or directly undertake other activities after the emergency has expired is fully subject to the review procedures of this Part;
25. local legislative decisions such as rezoning where the Town Board determines the action will not be approved.

IV. Management and Coordination of the LWRP

- A. The Town of Bethlehem _____ shall be responsible for coordinating review of actions in the Town's coastal area for consistency with the LWRP, and will advise, assist and make consistency recommendations to other Town agencies in the implementation of the LWRP, its policies and projects, including physical, legislative, regulatory, administrative and other actions included in the program.
- B. The _____ shall coordinate with the New York State Department of State regarding consistency review of actions by Federal agencies and with State agencies regarding consistency review of their actions.
- C. The _____ shall assist the Town Board in making applications for funding from State, Federal, or other sources to finance projects under the LWRP.
- D. The _____ shall perform other functions regarding the coastal area and direct such actions or projects as the Town Board may deem appropriate, to implement the LWRP.

V. Review of Actions.

- A. Whenever a proposed action is located within the Town's coastal area, each Town agency shall, prior to approving, funding or undertaking the action, make a determination that it is consistent with the LWRP policy standards summarized in Section H (below) herein. No action in the coastal area shall be approved, funded or undertaken by that agency without such a determination.
- B. Whenever a Town agency receives an application for approval or funding of an action, or as early as possible in the agency's formulation of a direct action to be located in the coastal area, the agency shall refer a copy of the completed CAF to the _____ within ten (10) days of its receipt and prior to making its determination, shall consider the recommendation of the _____ with reference to the consistency of the proposed action.
- C. After referral from an agency, the _____ shall consider whether the proposed action is consistent with the LWRP policy standards set forth in Section H (below) herein.

The _____ shall require the applicant to submit all completed applications, CAFs, EAFs, and any other information deemed necessary to its consistency recommendation. The _____ shall render its written recommendation to the agency within thirty (30) days following referral of the CAF from the agency, unless extended by mutual agreement of the _____ and the applicant or in the case of a direct action, the agency. The _____'s recommendation shall indicate whether the proposed action is consistent with or inconsistent with one or more of the LWRP policy standards and shall elaborate in writing the basis for its opinion. The _____ shall, along with a consistency recommendation, make any suggestions to the agency concerning modification of the proposed action, including the imposition of conditions, to make it consistent with LWRP policy standards or to greater advance them.

In the event that the _____'s recommendation is not forthcoming within the specified time, the agency shall make its consistency decision without the benefit of the _____'s recommendation.

- D. If an action requires approval of more than one Town agency, decision making will be coordinated between the agencies to determine which agency will conduct the final consistency review, and that agency will thereafter act as designated consistency review agency for the specific action being reviewed. Only one CAF per action will be prepared. If the agencies cannot agree, the Town Board shall designate the consistency review agency.

- E. Upon receipt of the _____'s recommendation, the agency shall consider whether the proposed action is consistent with the LWRP policy standards summarized in Section H (below) herein. The agency shall consider the consistency recommendation of the _____, the CAF and other relevant information in making its written determination of consistency. No approval or decision shall be rendered for an action in the coastal area without a written determination of consistency having first been rendered by a Town agency. The Zoning Board of Appeals is the designated agency for the determination of consistency for variance applications subject to this law. The Zoning Board of Appeals shall consider the written consistency recommendation of the _____ in the event and at the time it makes a decision to grant such a variance and shall impose appropriate conditions on the variance to make the activity consistent with the objectives of this law.
- F. Where an EIS is being prepared or required, the draft EIS must identify applicable LWRP policies standards in Section H (below) and include a thorough discussion of the effects of the proposed action on such policy standards.
- G. In the event the _____'s recommendation is that the action is inconsistent with the LWRP, and the agency makes a contrary determination of consistency, the agency shall elaborate in writing the basis for its disagreement with the recommendation and state the manner and extent to which the action is consistent with the LWRP policy standards.
- H. Actions to be undertaken within the coastal area shall be evaluated for consistency in accordance with the following summary of LWRP policy standards, which are derived from and further explained and described in Section III (Policies) of the Town of Bethlehem LWRP, a copy of which is on file in the Town Clerk's office and available for inspection during normal business hours. Agencies which undertake direct actions must also consult with Section IV (Proposed Uses and Projects), in making their consistency determination.

The action must be consistent with the policies to:

1. Restore, revitalize and redevelop deteriorated and underutilized waterfront areas for uses dependent on a waterfront location and compatible with the historic and scenic character of the area (Policy 1).
2. Encourage tourism through preservation, enhancement and/or appropriate resources of historic, scenic and recreational interest (Policy 1A);
3. Retain and encourage the development of water dependent uses on or near coastal waters (Policy 2);
4. Ensure that development occurs where adequate public in fracture is available (Policy 5);
5. Streamline development permit procedures (Policy 6);
6. Protect and preserve fish and wildlife habitats of local importance and those which
7. DOS has identified as significant, from human disruption and chemical contamination (Policies 7, 7A, 7B, 7C, 7D, 7E and 8);
8. Maintain and expand the recreational use of existing fish and wildlife resources (Policy 9);
9. Maintain, promote and expand commercial fishing opportunities (Policy 10).
10. Minimize flooding and erosion hazards through proper siting of buildings and structures; protection of natural protective features; construction of carefully selected, long-term structural measures; and the use of appropriate non-structural means (Policies 11,12,13,14,15 and 17);
11. Public funds shall be used for erosion protection structures only where necessary and in an appropriate manner (Policy 16);

12. Safeguard vital economic, social and environmental interests in the coastal area when major actions are undertaken (Policy 18);
13. Maintain and improve public access to the shoreline and to water-related recreational resources, while protecting the environment and adjacent land uses (Policies 19, 20, and 20A);
14. Encourage and facilitate water-dependent and water-enhanced recreational resources and facilities near coastal waters (Policies 21, 21A and 21B);
15. Encourage the development of water-related recreational resources and facilities, as multiple-uses, in appropriate locations within the shore zone. (Policy 22);
16. Protect and enhance scenic and aesthetic resources (Policies 23, 23A);
17. Protect and enhance scenic and aesthetic resources (Policies 24A, 24B, 24C and 25);
18. Conserve and protect agricultural lands (Policy 26);
19. Site and construct energy facilities in a manner which will be compatible with the environment and contingent upon the need for a shorefront location and in such a manner as to avoid adverse environmental impacts when in operation (Policies 27 and 40);
20. Undertake ice management practices to avoid adverse coastal impacts (Policy 28);
21. Protect surface waters and ground waters from direct and indirect discharge of pollutants and from overuse (Policies 30, 31, 32, 33, 34, 35, 36, 37 and 38);
22. Ensure that dredging and dredge spoil disposal are undertaken in a manner protective of natural resources (Policies 15 and 35);
23. Ensure that any transportation, handling or disposal of hazardous wastes and effluent is undertaken in a manner which will not adversely affect the environment (Policy 39);
24. Protect air quality (Policies 41, 42, and 43) and
25. Preserve and protect tidal and freshwater wetlands (Policy 44).

- I. Each agency shall maintain a file for each action made the subject of a consistency determination, including any recommendations received from the _____. Such files shall be made available for public inspection upon request.

VI. Enforcement.

No action within the Bethlehem coastal area which is subject to review under this chapter shall proceed until a written determination has been issued from a Town agency that the action is consistent with the Town's LWRP policy standards. In the event that an activity is being performed in violation of this law or any conditions imposed there under, the Building Inspector or any other authorized official of the Town shall issue a stop work order and all work shall immediately cease. No further work or activity shall be undertaken on the project so long as a stop work order is in effect. The Town Building Inspector, Town Attorney, Code Enforcement Officer and Police Department shall be responsible for enforcing this Chapter.

VII. Violations.

- A. A person who violates any of the provisions of, or who fails to comply with any condition imposed by, this Chapter shall have committed a violation, punishable by a fine not exceeding _____ (\$_____) for a conviction of a first offense and punishable by a fine of _____ dollars (\$_____) for a conviction of a second or subsequent offense. For the purpose of conferring jurisdiction upon courts and judicial officers, each week of continuing violation shall constitute a separate additional violation.

- B. The Town Attorney is authorized and directed to institute any and all actions and proceedings necessary to enforce this local law. Any civil penalty shall be in addition to and not in lieu of any criminal prosecution and penalty.

VIII. Severability.

The provisions of this local law are severable. If any provision of this local law is found invalid, such finding shall not affect the validity of this local law as a whole or any part or provision hereof other than the provision so found to be invalid.

IX. Effective Date.

This local law shall take effect immediately upon its filing in the office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.

COASTAL ASSESSMENT FORM

A. **INSTRUCTIONS** (Please print or type all answers)

1. Applicants, or in the case of direct actions, Town of Bethlehem agencies, shall complete this CAF for proposed actions which are subject to the consistency review law. This assessment is intended to supplement other information used by a Town of Bethlehem agency in making a determination of consistency.
2. Before answering the questions in Section C, the preparer of this form should review the policies and explanations of policy contained in the Local Waterfront Revitalization Program (LWRP), a copy of which is on file in the Town of Bethlehem Clerk's office. A proposed action should be evaluated as to its significant beneficial and adverse effects upon the coastal area.
3. If any questions in Section C on this form is answered "yes", then the proposed action may affect the achievement of the LWRP policy standards contained in the consistency review law. Thus, the action should be analyzed in more detail and, if necessary, modified prior to making a determination that it is consistent with the LWRP policy standards. If an action cannot be certified as consistent with the LWRP policy standards, it shall not be undertaken.

B. **DESCRIPTION OF SITE AND PROPOSED ACTION**

1. Type of agency action (check appropriate response):

- Directly undertaken (e.g. capital construction, planning activity, agency regulation, land transaction)
- Financial assistance (e.g. grant, loan, subsidy)
- Permit, approval, license, certification

Agency undertaking action: _____

2. Describe nature and extent of action: _____

3. Location of action: _____

Street or Site Description

4. Size of site: _____
5. Present land use: _____
6. Present zoning classification: _____
7. Describe any unique or unusual land forms on the project site (i.e. steep slopes, swales, ground depressions, other geological formations): _____

8. Percentage of site which contains slopes of 15% or greater: _____ %
9. Streams, lakes, ponds or wetlands existing within or contiguous to the project area?
- (1) Name: _____
- (2) Size (in acres): _____
- (3) Name: _____
- (4) Size (in acres): _____
- (5) Name: _____
- (6) Size (in acres): _____
- (7) Name: _____
- (8) Size (in acres): _____
- (9) Name: _____
- (10) Size (in acres): _____
- (11) Name: _____
- (12) Size (in acres): _____
- (13) Name: _____
- (14) Size (in acres): _____

10. If an application for the proposed action has been filed with the agency, the following information shall be provided:

- Name of applicant: _____
- Mailing Address: _____
- Telephone number: _____
- Application number, if any: _____

11. Will the action be directly undertaken, require funding, or approval by a state or federal agency?

Yes ___ No ___ If yes, which state or federal agency? _____

C. COASTAL ASSESSMENT (Check either "Yes" or "No" for each of the following questions)

	Yes	No
1. Will the proposed action be located in, or contiguous to, or have a potentially adverse effect upon any of the resource areas identified on the coastal area map:		
(a) Significant fish or wildlife habitats?		

(b) Scenic resources of local or statewide significance?		
(c) Important agricultural lands?		
(d) Natural protective features in an erosion hazard area		

If the answer to any question above is yes, please explain in Section D any measures which will be undertaken to mitigate any adverse effects.

2. Will the proposed action have a significant effect upon:

(a) Commercial or recreational use of fish and wildlife resources?		
(b) Scenic quality of the coastal environment?		
(c) Development of future, or existing water dependent uses?		
(d) Operation of the State's major ports?		
(e) Land or water uses within a small harbor area?		
(f) Stability of the shoreline?		
(g) Surface or groundwater quality?		
(h) Existing or potential public recreation opportunities?		
(i) Structures, sites or districts of historic, archeological or cultural significance to the Town of Bethlehem, State or nation?		

3. Will the proposed action involve or result in any of the following:

(a) Physical alteration of land along the shoreline, land under water or coastal waters?		
(b) Physical alteration of two (2) acres or more of land located elsewhere in the coastal area?		
(c) Expansion of existing public services or infrastructure in undeveloped or low density areas of the coastal area?		
(d) Energy facility not subject to Article VII or VIII of the Public Service Law?		
(e) Mining, excavation, filling or dredging in coastal waters?		
(f) Reduction of existing or potential public access to or along the shore?		
(g) Sale or change in use of publicly-owned lands located on the		

shoreline or under water?		
(h) Development within a designated flood or erosion hazard area?		
(i) Development on a beach, dune, barrier island or other natural feature that provides protection against flooding or erosion?		
(j) Construction or reconstruction of erosion protective structures?		
(k) Diminished surface or groundwater quality?		
(l) Removal of ground cover from the site?		

4. **PROJECT**

(a) If a project is to be located adjacent to shore:

(1) Will water-related recreation be provided?		
(2) Will public access to the foreshore be provided?		
(3) Does the project require a waterfront site?		
(4) Will it supplant a recreational or maritime use?		
(5) Do essential public services and facilities presently exist at or near the site?		
(6) Is it located in a flood prone area?		
(7) Is it located in an area of high erosion?		

(b) If the project site is publicly owned:

(1) Will the project protect, maintain and/or increase the level and types of public access to water related recreation resources and facilities?		
(2) If located in the foreshore, will access to those and adjacent lands be provided?		
(3) Will it involve the siting and construction of major energy facilities?		
(4) Will it involve the discharge of effluents from major steam electric generating and industrial facilities into coastal facilities?		

(c) Is the project site presently used by the community neighborhood as

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an open space or recreation area?		
(d) Does the present site offer or include scenic views or vistas known to be important to the community?		
(e) Is the project site presently used for commercial fishing or fish processing?		
(f) Will the surface area of any waterways or wetland areas be increased or decreased by the proposal?		
(g) Does any mature forest (over 100 years old) or other locally important vegetation exist on this site which will be removed by the project?		
(h) Will the project involve any waste discharges into coastal waters?		
(i) Does the project involve surface or subsurface liquid waste disposal?		
(j) Does the project involve transport, storage, treatment or disposal of solid waste or hazardous materials?		
(k) Does the project involve shipment or storage of petroleum products?		
(l) Does the project involve discharge of toxics, hazardous substances or other pollutants into coastal waters?		
(m) Does the project involve or change existing ice management practices?		
(n) Will the project affect any area designated as a tidal or freshwater wetland?		
(o) Will the project alter drainage flow, patterns or surface water runoff on or from the site?		
(p) Will best management practices be utilized to control storm water runoff into coastal waters?		
(q) Will the project utilize or affect the quality or quantity of sole source or surface water supplies?		
(r) Will the project cause emissions which exceed federal or state air quality standards or generate significant amounts of nitrates or sulfates?		

D. REMARKS OR ADDITIONAL INFORMATION: (Add any additional sheets to complete this form.)

If assistance or further information is needed to complete this form, please contact Town of Bethlehem Clerk at _____.

Preparer's Name: _____ Telephone Number: _____

Title: _____ Agency: _____ Date: _____