

TOWN OF BETHLEHEM

LOCAL WATERFRONT REVITALIZATION PROGRAM

Bethlehem, New York

May 2010

Revised April 2015

FINAL DRAFT



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Section 1

Section 1 - Waterfront Revitalization Area

A. 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 Anders Lane to its intersection with Route 144; thence north following Route 144 to the intersection with Retreat House Road; thence north following Retreat House Road to the intersection with Corning Hill Road; thence east following Corning Hill Road to the 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.

B. 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, and east of Interstate 87 (the NYS Thruway), with the following delineation:

Beginning at the centerline of the main channel of the Hudson River the WRA boundary follows the municipal boundary with the Town of Coeymans west-north-west to 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, being the centerline of the Normanskill Creek; thence generally southeast following the centerline of the Normanskill Creek approximately 1.1 miles; thence generally east, passing south of a fuel storage tank farm to the centerline of the Hudson River; thence south following that centerline to the point of origin.

The proposed boundary expansion would represent nearly 4,000 acres of additional land within the Town of Bethlehem. See Map 1: Waterfront Revitalization Boundary, 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.

Map 1: Waterfront Revitalization Area



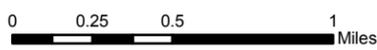
WATERFRONT REVITALIZATION BOUNDARY

Local Waterfront Revitalization Program

September 2009

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

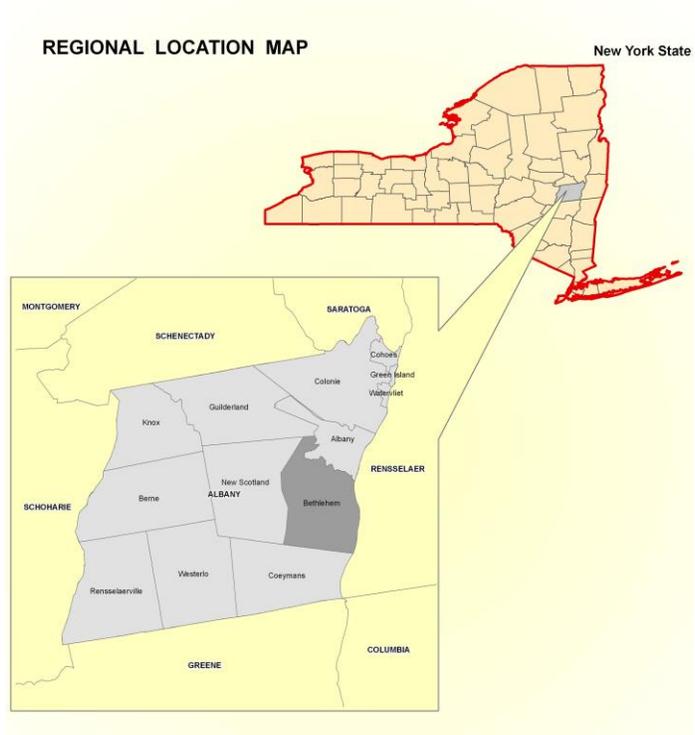
Section 2 – Inventory and Analysis

A. *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 in direction through the Town and defines the western edge of the waterfront area. New York State Route 9W is located just west of the Thruway. The only major route that lies completely within the waterfront area is New York State Route 144, which runs roughly 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.



B. History

Human life and economy in this region 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 people 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 Wies 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.

C. 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)

D. Community Facilities and Services, Transportation and Pipeline 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 waterfront area (roughly north of Wemple Road), whereas the Ravena – Coeymans – Selkirk Central School District serve students residing within the southern portion of the waterfront area (roughly south of Wemple Road). (See Map 2: Community Facilities and Services, Transportation, and Pipeline Infrastructure)

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, 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 waterfront area, in Selkirk. An ambulance station is also located near the waterfront area, 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 waterfront area. There are several major roads within the Town that provide easy access to points north and south of the waterfront area, including NYS Route 9W, the New York State Thruway, and NYS Route 144. However, routes providing access to points west (out of the waterfront area), and east (into the waterfront area) are limited to NYS Route 32, Wemple Road, Clapper Road, Beaver Dam Road and NYS Route 396.

As a whole, the northern portion of the Town's waterfront 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 waterfront area is the need for improved accessibility, particularly those on the east side of State Route 144. For any redevelopment to be successful issues relating to accessibility from State Route 144 will need to be addressed. Route 9W provides the northern portion of the waterfront area 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. Consideration should be given as to how this intersection could be improved to provide improved access to Route 144. Analysis should also consider how bike and pedestrian connections could be incorporated into any redesign of Corning Hill Road.

The Town and the State investigated this issue in 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 by both the Town and State over the past several years, but has yet to be finalized by these two entities.

CSX freight railroad lines travel north-south through the WRA. The rail line is generally located west of the I-87 corridor and is a primary line serving the Port of Albany, located to the north of the WRA. The tracks are owned and maintained by CSX.

While the primary means of transportation for those residing in and visiting the waterfront area 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 Albany¹. Although there are two bus lines that run through the WRA, there are not any stops. The nearest stops to the WRA include:

- > Corning Hill Road and South Pearl Street

¹ As of September 24, 2006

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

Infrastructure - The capability of the sewer and water systems to accommodate future development is of utmost importance. Public water and sewer do not serve a large portion of the waterfront area. As seen on Map 2, only 51.5% of the parcels (433 parcels) are served by public water, and 27.4% of the parcels (230 parcels) are served by public sewer. Many of the remaining areas use individual septic systems. Given the soil conditions (further discussed in Section 2: M. Natural Resources and Environmentally Sensitive Resources), the waterfront area may be prone to more system failures than other areas throughout the Town. With that, limited development should occur in these areas. Any new development should be required to include improvements to the existing sewer and water system.

Bethlehem residents and businesses are served by a water district which, in 2010, provided almost 2 billion gallons of water through a 175 mile long system of pipes. The district draws its water from both “surface water” and “ground water” sources. The Vly Reservoir, with a storage capacity of 1.25 billion gallons, is the primary source of potable water for residents. Two deep wells - New Salem wells and the Infiltration Gallery & new well field - additionally supply high quality drinking water. Both of the Bethlehem water treatment plants perform multi level treatment to ensure the safety of drinking water. Also, the Town currently purchases water from the City of Albany to supplement the Town’s drinking water capacity. The Industrial area of the town is served by a groundwater infiltration system adjacent to the Hudson River on Schemerhorn Island. The Town of Bethlehem Dinmore Road Chlorination Station removes and chlorinates water from the Hudson in the Vloman Kill area.

Managing, maintaining and reinvesting in the sewer and water services provided in the northern portion of the Town’s waterfront will be an important ingredient to encouraging private sector re-investment. Some areas need maintenance, while others need new public sewer and water systems. Investments made in the sewer and water network should be coordinated with any transportation access improvements.

E. Existing Land and Water Uses

The Town’s 10 mile riverfront has been divided into three separate areas based on existing land and water use patterns: North Riverfront, Central Riverfront and South Riverfront. Within each of the three areas, several districts have also been identified. The current land use patterns within the waterfront area are varied. Agricultural, residential, and industrial uses are prevalent, while some land is vacant or undeveloped (Map 3: Existing Land and Water Uses).

1. North Riverfront District

Currently, water-dependent and water-enhanced industry is limited to the North Riverfront area of the waterfront. This area has a strong connection to the City of Albany Port Authority via its industrial, port-related activities. Business operations in the North Riverfront directly benefit from its proximity near port activities, including petroleum storage and refinery facilities as well as trans-shipment properties near the Normans Kill. A barge loading dock is located near the southern portion of the petroleum storage tanks. Also near the Normans Kill is Scarano Boat Building, a passenger vessel manufacturer that transports finished excursion vessels via the Hudson River to their ultimate destinations throughout the country. Scarano Boat Building has an inlet area with a crane for launching and recovering boats. Vacant lands in this area are primarily former industrial lands and some contain remnants of the petroleum refinery industry.

Several projects have been proposed in this area, including one to develop a mixed office, retail, residential and entertainment complex that was subsequently withdrawn. 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 for those who reside in and visit the waterfront. 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.

The North Riverfront District provides the greatest opportunity to contribute to the stated goal of the Comprehensive Plan of providing for a balanced tax base. 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

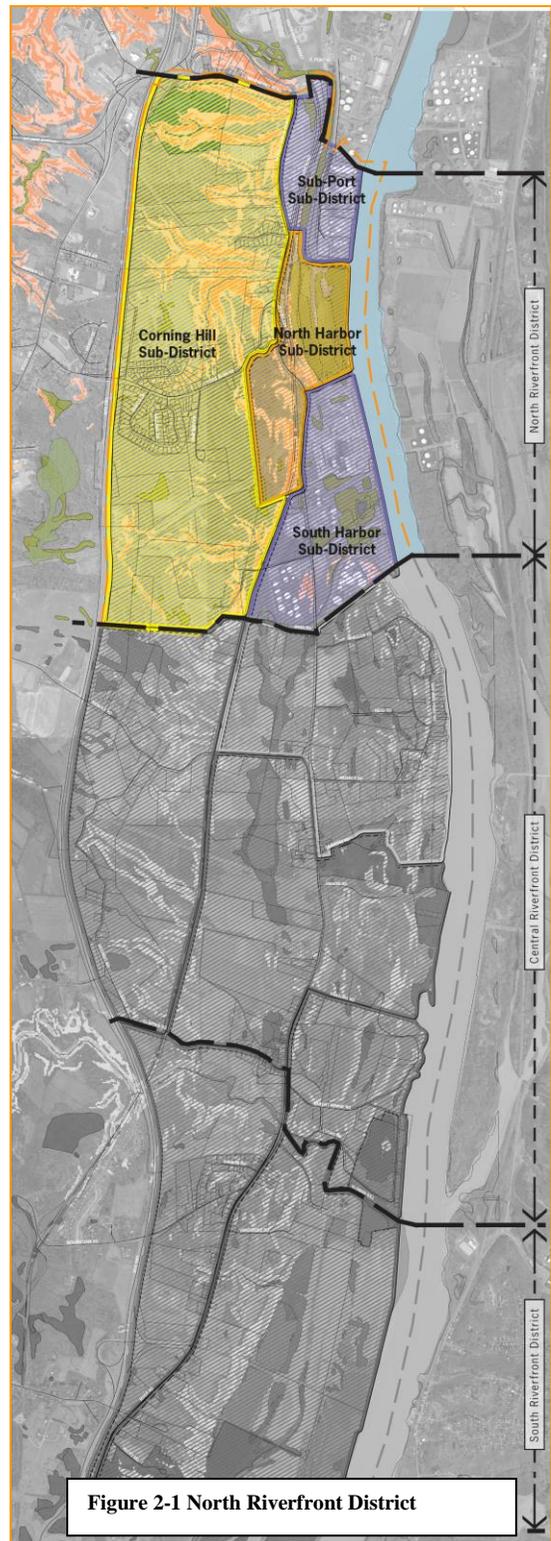


Figure 2-1 North Riverfront District

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 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 commercial/industrial uses. 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.

a. Sub-Port

The Sub-Port District provides opportunities for marine-based industrial activities that support port activities within the Albany-Rensselaer Port District. A key redevelopment parcel is the Bohl Excavation site. The site, approximately 37 acres, is generally located between Retreat House Road and the west side of Route 144. The site is currently privately held and is largely used for storage of commercial construction materials and vehicles. Redevelopment of the site could 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 employment opportunities and offers light industrial uses thereby helping to diversify the Town's tax base. Existing zoning would support this type of development. The Town's Planned Development District regulations may also be applied for such a project.

b. North Harbor

The North Harbor District will transform from traditional industrial uses to more modern, cleaner industrial uses. While industrial uses are encouraged in the North Harbor District, there is a lack of harbor infrastructure and commercial vessel support facilities. In the future, there will be opportunities for the redevelopment of the district, which will provide new employment opportunities while helping to diversity the Town's tax base.

c. South Harbor

It's 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. In February 2005 the Albany Steam Power Station was closed and replaced by the Bethlehem Energy Center (BEC), both located in this stretch of the waterfront. The Bethlehem Energy Center is a 747 MW state-of-the-art, combined-cycle plant fueled by natural gas. The BEC was built to replace the Albany Steam Generating System, a 376 MW oil/gas plant in operation since 1952, which was purchased by PSEG Power in 2000. The efficient process of combined-cycle technology enables the BEC to use 36 percent less fuel than the Albany Station to generate each kilowatt-hour of electricity. In addition, the BEC is equipped with an advanced closed-cycle cooling system. The facility is among the cleanest power plants in New York, reducing emission rates of nitrogen oxide and sulfur dioxide by more than 98 percent. The plant draws 99 percent less water from the Hudson River than the old Albany Station.

d. 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 this district is defined by the steep sloping nature of the topography. Within the Corning Hill District most land has reached optimum building density. However, there is some opportunity for continued residential growth in a few small pockets in the district. The district also includes a unique ecological interpretation opportunity on Old Route 9W with the Bio-Reserve 68-acre site. A natural haven for wildlife and educational and scientific opportunities is being created and maintained on the reserve. The Town should work with the property owner to expand the programs offered as well as the lands included in the Bio-Reserve.

2. Central Riverfront District

The **Central Riverfront** is an important transition area that 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. 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 district includes two public parks, Henry Hudson Park and the newly established Moh He Con Nuck Nature Preserve. Moh He Con Nuck is located on a 54-acre parcel on Simmons Road and a Master Plan has been developed for the property. Funding for some of the Phase I development of the new park was provided through grants from the New York State Assembly and Scenic Hudson.

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. 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. 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.

a. 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. Maintaining the interface between the North Riverfront District and 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.

The Van Wies district is defined by its stable, low intensity, peaceful residences. This land use should be continued. Future redevelopment at either end of this district should include the appropriate buffers to maintain this as one of Bethlehem's unique neighborhoods. The potential for a trail network should be examined as part the proposed riverfront trail network.

b. Riverfront Core

The Riverfront Core District provides an opportunity for safe and easy access to the riverfront for a range of users. It can be seen as the central hub along Bethlehem's riverfront. The Glenmont Job Corps Site

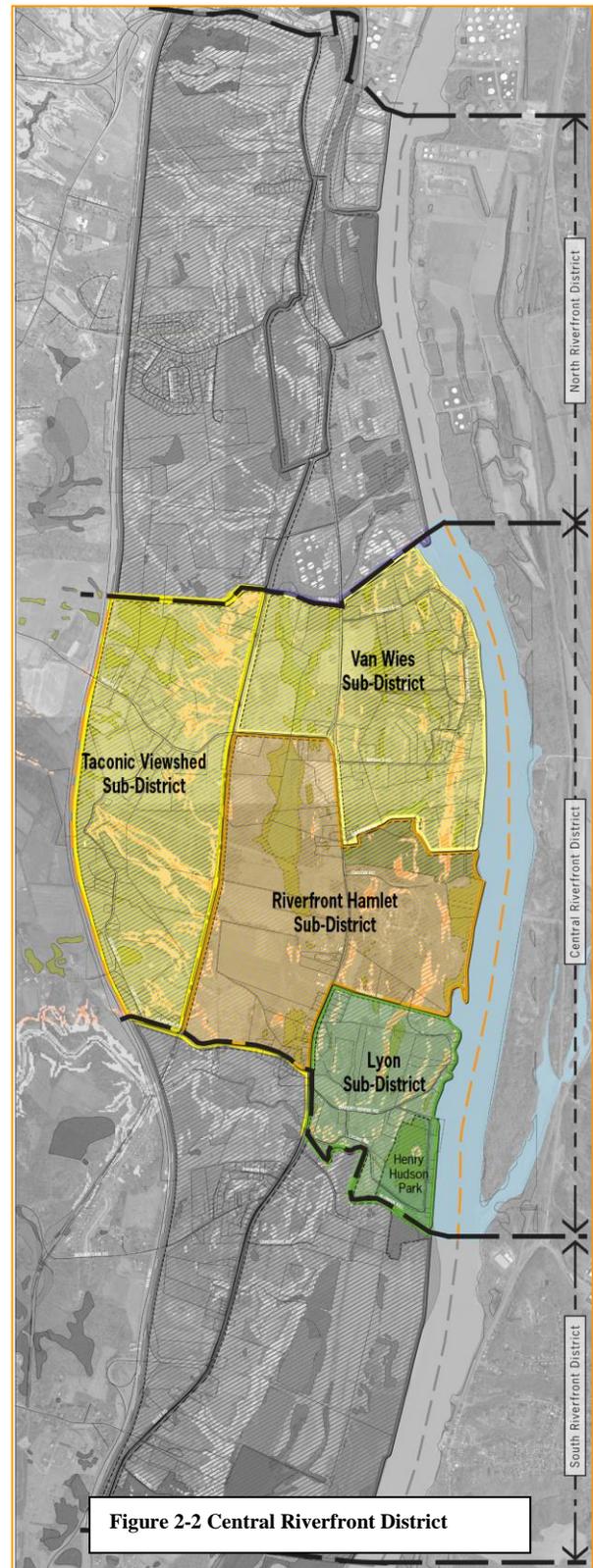


Figure 2-2 Central Riverfront District

provides the most access to the riverfront, but is currently inaccessible to the general public. 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 north of the Job Corps property. Job Corps is a no-cost education and career technical training program administered by the U.S. Department of Labor that helps young people ages 16 through 24 improve the quality of their lives through career technical and academic training. The Job Corps program is authorized by Title I-C of the Workforce Investment Act of 1998. Glenmont Job Corps Center is overseen by the Boston Regional Office of Job Corps and is operated by Adams and Associates, Inc.. Combined with the Job Corps site, the adjacent Town-owned property on Simmons Road connects the community with the Hudson River, and thus 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. The town-owned property currently does not have "official" public access to the riverfront because of private property ownership. These two adjacent sites could connect the community with the Hudson River, and should be developed with a traditional and civic character, creating a desirable destination.

New construction in this district 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.

c. Lyon

With its large tracts of relatively undeveloped, natural lands, the Lyon District provides an important transition to the South Riverfront. The district is dominated by private property ownership, with much of the property having high natural and ecological value. 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, are an essential component of the Lyon District.

The Lyon District also includes some important community assets like Henry Hudson Park and the Vloman Kill. Covering approximately 51 acres, Henry Hudson Park provides the 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 Scenic Hudson, with financial assistance from the New York State Assembly, recently secured funding for the purchase of 3 acres of land located along the northern end of the Henry Hudson Town Park. This park expansion includes additional riverfront and will allow for the development of a canoe and kayak launch. People of Bethlehem wish to maintain the quiet and natural character of the park while

improving upon the existing park amenities. Access to the woodlands, the river, the Vloman Kill, and safe access along the roadways is needed. It has been noted that the Wastewater Treatment Plant located immediately south of the park can detract from the experience at the park, particularly on weekends and holidays; offensive odor emissions associated with the treatment process can cause a nuisance to the enjoyment of the park. It is also recognized, however, that the Wastewater Treatment Plant is a valuable community infrastructure asset that provides public health, economic and environmental benefit.

d. 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. Section 4 of this report identifies a potential opportunity to create a look-out point in the district that looks east to the Taconic Mountain Range.

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.

3. 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 NYS 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.

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.

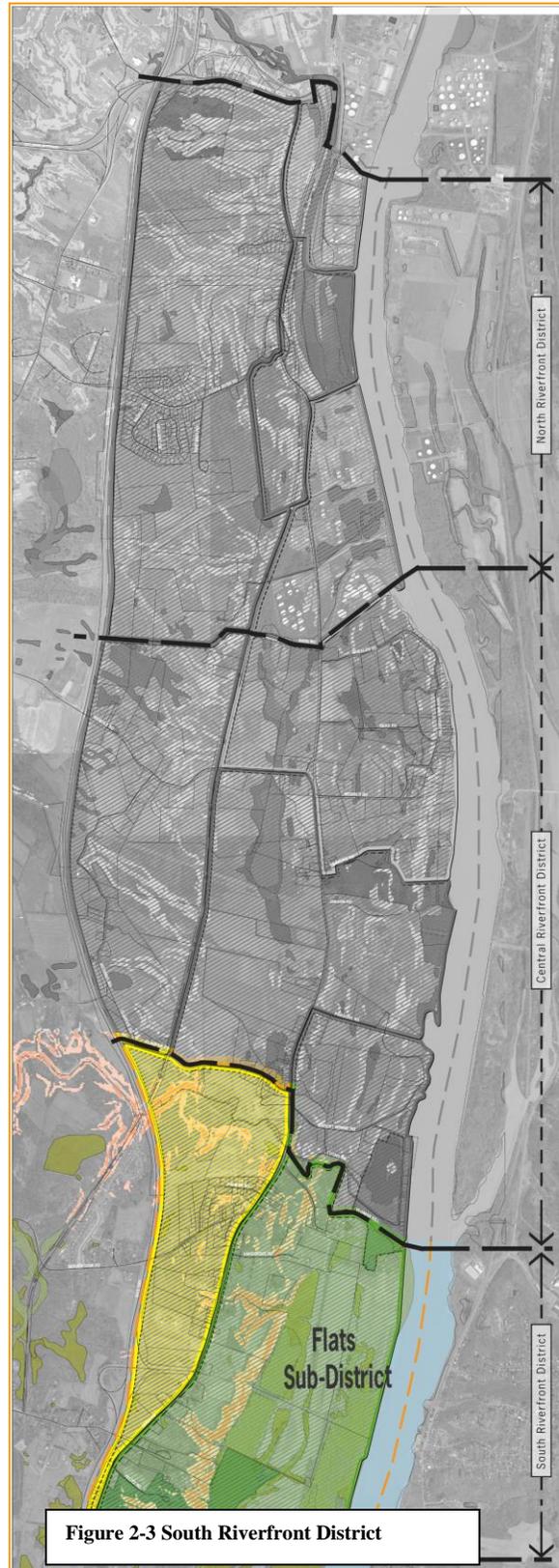
The **South Riverfront** has significant environmental constraints principally defined by the wetland nature of the area. The areas visible from the water consist of mostly natural shoreline. Lands are predominantly undeveloped, agricultural, or low-density residential. This area is accessible from the Thruway via Exit 22. 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.

For more than ten years, the Town, in cooperation with NYS Department of Transportation and the Capital District Transportation Committee, has been considering a proposal to construct the Selkirk Bypass to reduce heavy truck traffic through the residential areas of the hamlet of Selkirk. One of the potential alignments involves extension of the new Selkirk Bypass road east of the Thruway to Route 144. This extension would likely result in additional growth and the need for planning for development of the river corridor.

a. 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.

The Baker Farm Site, currently privately held and not an active farm, provides a great deal of opportunity within the Flats District. It is located directly off the Thruway and provides dramatic, sweeping views of

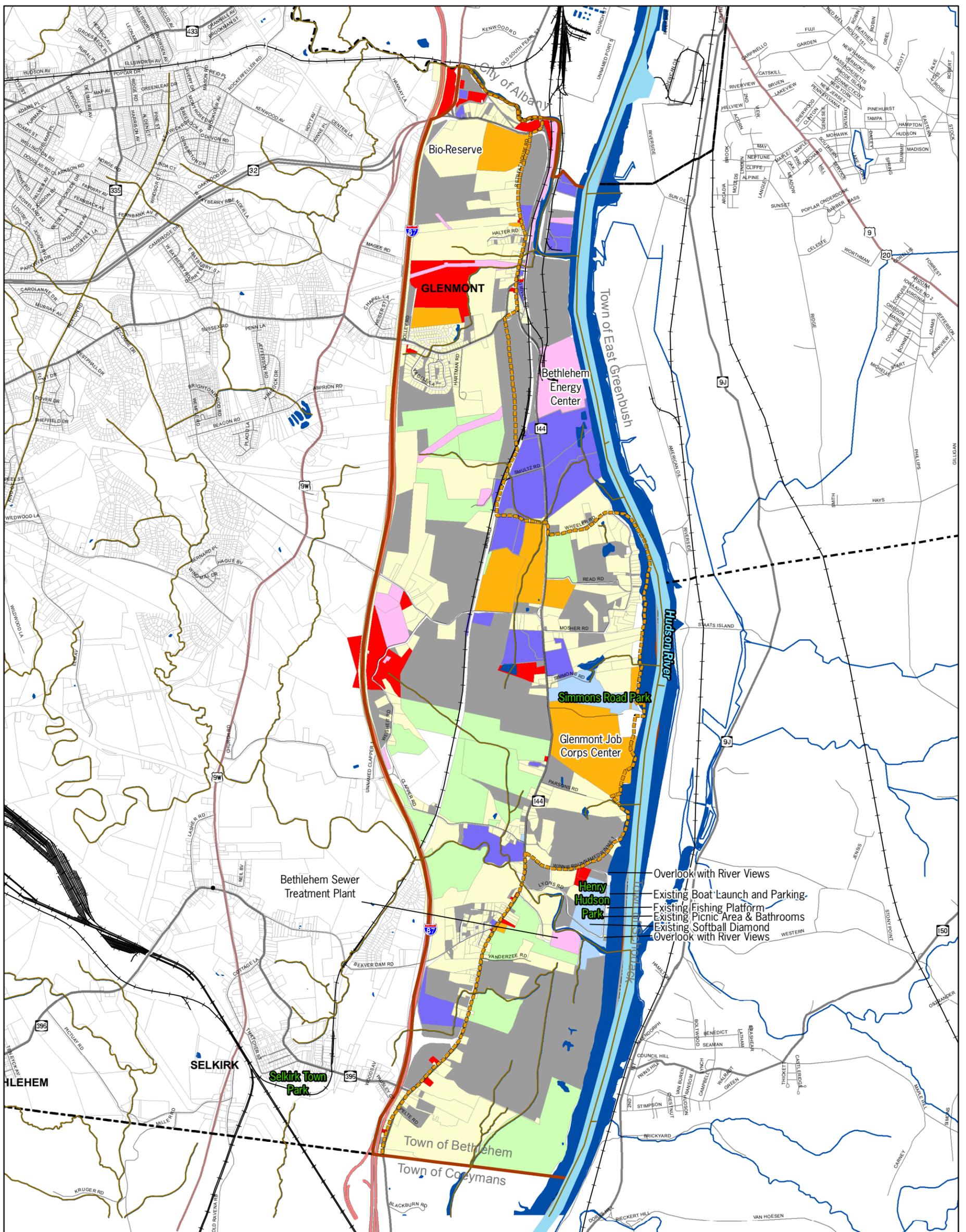


both the Taconic Mountain Range and the Hudson River. The house on the site is currently vacant. Because of its unique setting and accessibility, this site can provide a unique opportunity for a nature and heritage tourism-based venture, enhancing interpretation and protection of the cultural and environmental aspects of the region.

Water Uses within the Town

In addition to the water-related uses described for each district, water-borne traffic within the Town's waterfront area consists of commercial shipping, generally comprised of cargo vessels plying between the Port of New York and New Jersey and the Port of Albany. In addition, recreational boating is very common within the Town, as it is throughout the Hudson River estuary.

Map 2: Existing Land and Water Uses



- Overlook with River Views
- Existing Boat Launch and Parking
- Existing Fishing Platform
- Existing Picnic Area & Bathrooms
- Existing Softball Diamond
- Overlook with River Views

EXISTING LAND & WATER USES

Local Waterfront Revitalization Program
May 2010

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
- Navigable Channel of Hudson River

0 0.25 0.5 1 Miles

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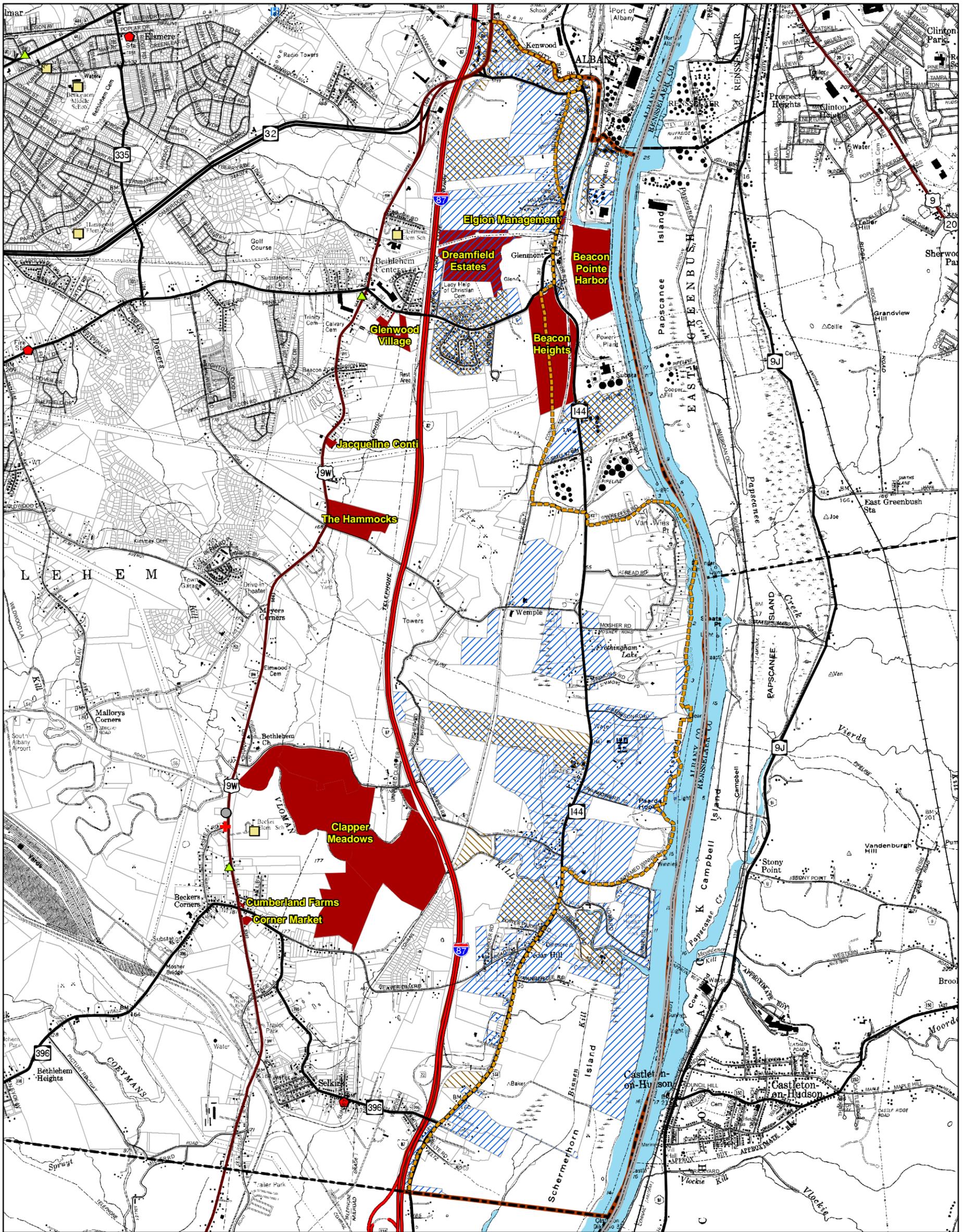
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***Map 3: Community Facilities and Services, Transportation,
and Pipeline Infrastructure***

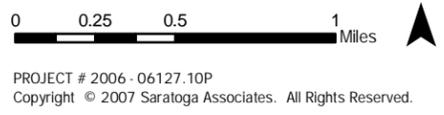


PIPELINE PROJECTS

Town of Bethlehem
Local Waterfront
Revitalization Program

July 2008

- 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

F. Property Assessment

This organization of property into land use classifications allows for the breakdown and comparison of the local tax base composition. Although there is not 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.²

Likewise, residential parcels comprise the majority of the waterfront area, with such land use totaling 62.4% of all parcels in the waterfront area, yet only 36.5% of the total assessed valuation. However, the residential composition of the waterfront area 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, with residential lands here generally settled less densely than elsewhere. This can be attributed to the rural character that is much more prevalent throughout the waterfront area when compared to the Town as a whole.

² 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.

Assessed Valuation by Land Use Classification, Town of Bethlehem: 2005 – 2006

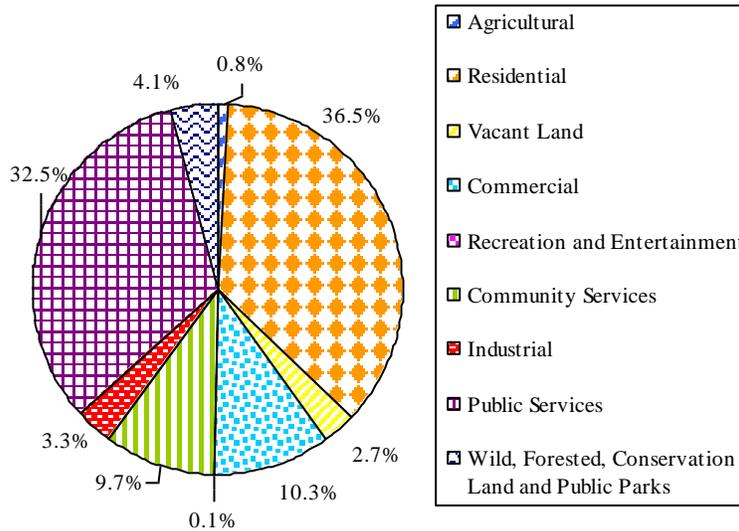
(Source: New York State Office of Real Property Services;

Town of Bethlehem and Albany County; Analysis made by Saratoga Associates)

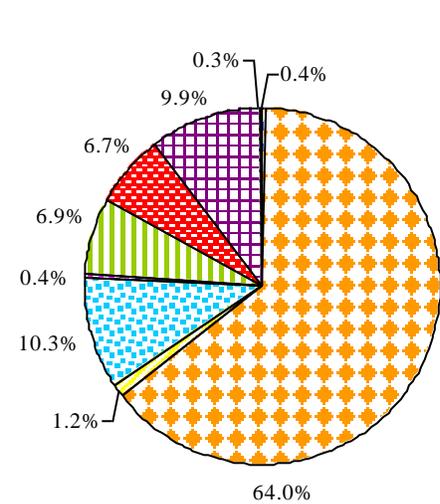
Land Use	Waterfront Revitalization Area (2006)			Town of Bethlehem (2005)		
	Number of Parcels	Total Assessed Valuation (AV)	Percent of Total AV	Number of Parcels	Total Assessed Valuation (AV)	Percent of Total AV
Agricultural	21	\$2,645,000	0.8%	87	\$9,364,850	0.4%
Residential	524	\$122,206,300	36.5%	10,460	\$1,539,788,565	64.0%
Vacant Land	171	\$9,133,250	2.7%	1,639	\$27,863,634	1.2%
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%

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 waterfront area. 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 reflects the unique characteristics of the waterfront area and, as such, has implications for the types of future development that are appropriate within this part of the Town.

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)



G. EXISTING RIVERFRONT ZONING

The area along the riverfront is divided into two zoning districts (Map 4: Existing Riverfront Zoning). The northern section adjacent to the City of Albany is zoned Industrial, while areas south of this are zoned Rural Riverfront. An inland area at the intersection of these zones is designated Rural Hamlet. The purpose of this district 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.

Over time the North Waterfront 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).

The Central Waterfront is a mixture of zoning districts, including Rural Hamlet, Rural Riverfront, Mixed Economic Development, and Rural Light Industrial, which will foster a diverse mix of uses and connections. As delineated in the Rural Hamlet zoning designation, new development will take the form of Hamlet development, as defined in the 2005 Comprehensive Plan. New development will

be required to provide meaningful open space, bike and pedestrian connections and include expressions of the areas of historical significance.

Whether or not the Selkirk Bypass is constructed, this area of the waterfront holds significant development potential. This same land also provides an important scenic amenity with its vast pastoral, open space characteristics. This Town 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.

To emphasize the importance of preserving Bethlehem's inherent scenic qualities in the Lyon District, the Town will consider appropriate development controls for this area.

In the Southern Waterfront, this area is zoned predominantly Rural Riverfront (RR), Rural, and Residential A to maintain the low-density nature of this section of the waterfront.

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.

Relatively speaking, there is a small percentage of land zoned for residential use in the waterfront area. The land within this area is primarily zoned rural, with zoning classification 'R' comprising almost 6,200 acres, or 25.4% of all land. An additional 1,855 acres, or 21.4% of land is zoned 'RR'.

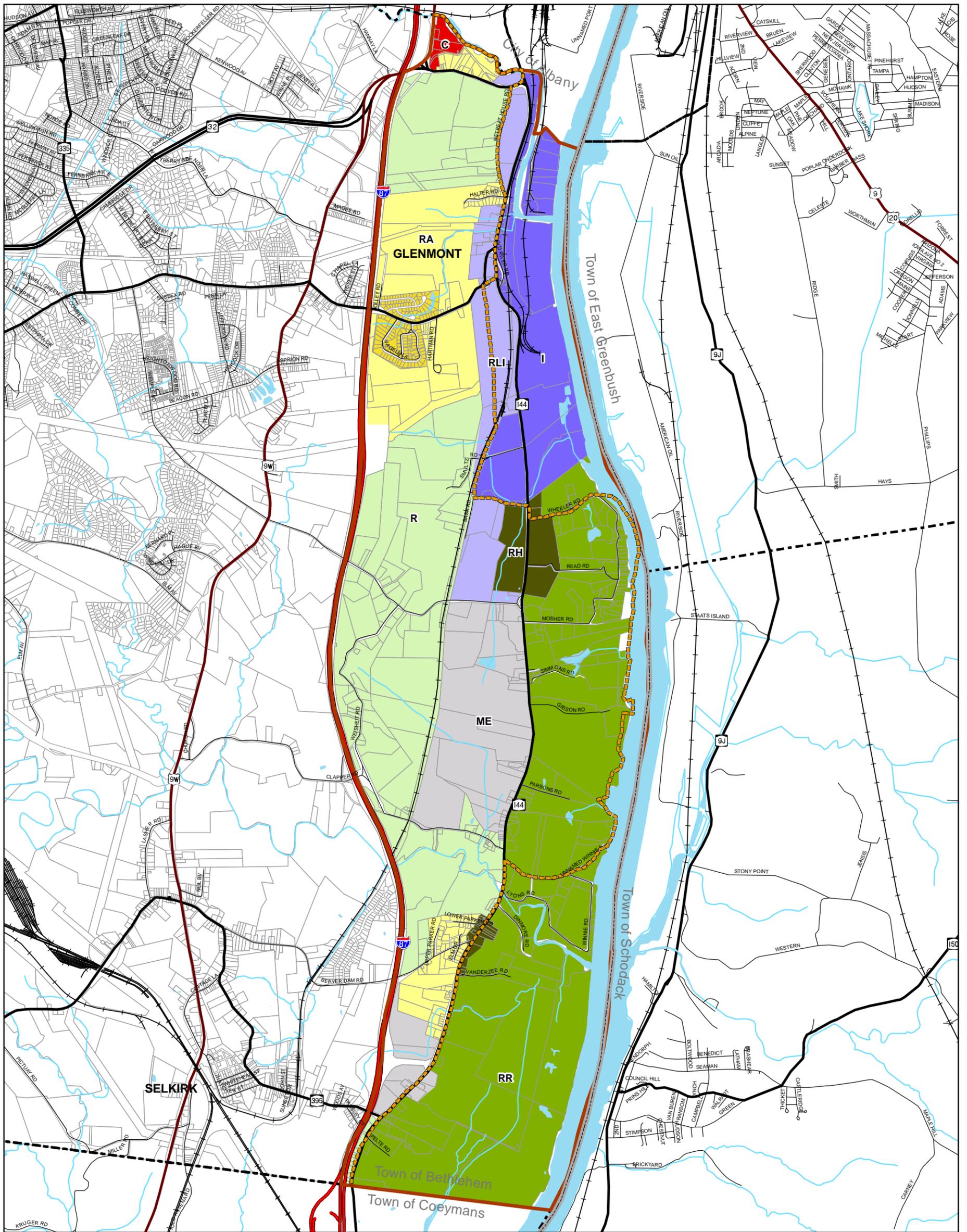
Roughly 14.7% of all land is zoned for Mixed Economic Development 'ME'. The Mixed Economic Development District requires a development master plan for parcels greater than five acres, and is generally intended for a mix of office, light industrial, manufacturing and technology-based businesses (primary 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 waterfront area. 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 Hamlet District. These zoning districts will be an important factor in determining the type of development that may occur. By concentrating desired development in areas already designated to accommodate it, the waterfront area'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

(Source: Town of Bethlehem and Albany County; Analysis made by Saratoga Associates)

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%

Map 4: Existing Riverfront Zoning



EXISTING RIVERFRONT ZONING

Local Waterfront Revitalization Program

July 2008

- 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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TOWN OF BETHLEHEM

H. Public Access, Recreation and Boating

Public access to the riverfront is limited to only a few areas in the Town of Bethlehem. Henry Hudson Park is a 53-acre park that offers a public boat launch, picnic areas, playground facilities, and several fields and courts for active recreation. It is the town's only official public access to the Hudson River. The NYS Department of Environmental Conservation boat launch is open to the general public, while the park itself is designated for Town of Bethlehem residents. Currently the boat launch in Henry Hudson Park is heavily used during the striped bass season, mid-April to the beginning of July. There is parking available for 35 cars and trailers. In its current configuration the boat launch and parking areas create conflicts because of limited space, which includes poor traffic flow and parking availability. As part of this LWRP a new Master Plan for Henry Hudson Park has been developed and addresses the conflicts by creating Woodland Area parking and realigning Park Road to provide additional parking spaces (Map 10: Henry Hudson Park Master Plan, Section 4.18).

The State boat launch does not include a fueling station, pump-out facilities or other boater services. The Town has voiced a need to provide for recreational boating services along the Hudson River at Henry Hudson Park or another location in Bethlehem, including dockage and commercial services, such as restaurants. Another potential location could emerge if the Glenmont Job Corps site becomes available for new development in the future. Residents have also voiced a need for a separate launch for non-motorized watercraft which could help reduce potential conflict between motorized and non-motorized boaters. The Henry Hudson Park Master Plan will also identify a separate area for non-motor boat launch.

I. Historical Resources

During the Revolution, the area was home to Colonel Francis Nicoll, who served in the New York Militia from 1775-1778. He participated in the extraction of cannons and munitions from New York City, prior to its surrender to the British in 1776. He also participated in the defense of Albany from Burgoyne's invasion from Canada in 1777. Although not visible today from the Hudson, Nicoll's home still stands at Cedar Hill. Near the home is a small cemetery where Col. Nicoll is buried. Also buried in the cemetery are seven other Revolutionary War soldiers, including Lt. Arie Van Wie and Sergeant James Selkirk.

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 Henry Hudson Park. The Bethlehem House was restored and is now listed on the State and National Register[s] of Historic Places.

Prior to the 19th Century, the river was main-street America. Today, Cedar Hill is an historic place on this "street." One of its first visitors was the Dutch explorer, Henry Hudson, as documented by a

marker near the American Flag in the Henry Hudson Park (Map 5: Natural, Recreational, Cultural and Historical Resources).

Van Wies Point, located in the Central Riverfront District, was settled by the Van Wie family in the mid 1600's. Later, it became a popular docking area for passengers going to Albany. Docking in Albany was considered hazardous due to shallows in the river. Dredging corrected this problem in the early 20th century. 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.

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.

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.

National Register of Historic Places, Town of Bethlehem: 2006 (Source: Town of Bethlehem, Town Historian)		
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 Church of Bethlehem	US Route 9W, Bethlehem vicinity, New York	November 12, 2002

J. Scenic Resources

Under the Local Waterfront Revitalization Program, local communities have the opportunity to designate 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 waterfront area a distinctive sense of place, especially in the increasingly urbanizing Town of Bethlehem. Within the WRA, the Town of Bethlehem wishes to maintain the existing character of each district defined: North Riverfront, Central Riverfront and South Riverfront. 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 character of the district is a combination of open, quiet, historic and bucolic feeling; new development should be sensitive to this and incorporate the existing character into its designs. The Central

Riverfront District provides unique views of the Taconic Mountain Range to the east. Future development should take this viewshed into account and incorporate opportunities for public viewing, when appropriate. The South Riverfront District will remain bucolic and natural, as intended by its predominantly Rural Riverfront. Views from the waterside are similar to those that might have been experienced by Henry Hudson. Existing zoning provides sufficient protection of these views and should be maintained with any future zoning amendments.

K. Navigation Issues

The Federally regulated shipping channel (See Map 3: Existing Land and Water Uses) stretches through the entire Bethlehem riverfront, though there are few commercial docks. The existing commercial docks are located in the North Riverfront District. 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. There are no known interferences with the existing navigation channel.

The Hudson River shipping channel is used commercially for access to the Port of Albany and the facilities located in the North Riverfront District, such as the transshipment properties near the Normans Kill and Scarano Boat Building; 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 the boat launch docks and bulkheads at Henry Hudson Park. The Town is currently engaging a consultant to identify shoreline stabilization options that are consistent with the Henry Hudson Park Master Plan; a soft shoreline study conducted by DEC and to provide better connectivity between the park and River.

L. WATER QUALITY

A number of Town facilities influence the water quality of the Hudson River. The Town's Wastewater Treatment Plant discharges treated household wastewater into the Hudson River in the Cedar Hill vicinity. A harmful activity for water quality is the discharge of untreated storm water runoff from the Town's Storm Drainage System. Heavy industries in the northern area of the Town, including tank farms and a power plant, have also degraded the water quality of the Hudson River.”

The Hudson River flows along the eastern edge of the Town of Bethlehem shoreline, 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.³

New York State Department of Environmental Conservation has classified the Bethlehem reach of the Hudson River as Class “C.” Therefore the existing and best use for this stretch of the river is to support fish populations and non-contact human activities.

The Normans Kill, tributary to the Hudson River, is a classified “C” waterway, with the best usage being fishing. The creek forms both the northern boundary of the waterfront area and the line between the Town of Bethlehem and the City of Albany. After passing under Interstate 87, US Route 9W and NY Route 32, the Normans Kill turns south to parallel Route 144 in Glenmont and then east to its mouth where it merges with the Hudson River.

The Vloman Kill is another tributary of the Hudson River that flows throughout the waterfront area. Running parallel to Clapper Road beneath Route 9W and Interstate 87 (the NYS Thruway), the Vloman Kill flows under Route 144 just north of Cedar Hill, later becoming the southern boundary of Henry Hudson Park. 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. Upstream to the west, outside the riverfront area, the classification improves to class “B,” which allows for swimming and other contact recreation but not for drinking water. The Town of Bethlehem Sewage Treatment Plant is located along the south side of the Vloman Kill near the mouth.

The Binnen Kill is another tributary of the Hudson River, flowing along the southern portion of the waterfront area between Shad and Schermerhorn Islands.

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 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 waterfront area 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 DOH recommends that all other species found within this portion of the Hudson River should not be eaten due to PCB contamination.

³ <http://www.dec.ny.gov/permits/6042.html>

The same situation applies to swimming in the Hudson River along the waterfront area. 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 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. 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.⁴

M. 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 waterfront 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 (Map 5: Natural, Recreational, Cultural and Historical Resources).

The Hudson River is unique in that it is an estuary 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 coastal area of the 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.

⁴ 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/udson/swimhudsonfearpt.pdf>, 2005.

As a result, implications on ecosystems, wetlands, and natural habitats must be considered when planning for recreational uses along the waterfront.

The New York Natural Heritage Program has identified numerous plant species that exist within the waterfront area, 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).⁵

Aquatic Vegetation - 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, but before Route 144, one can find 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.

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.

New York State, through the Department of Environmental Conservation generally regulates all wetlands that are 12.4 acres or more. Several clusters of DEC wetlands are located throughout the Town, comprising roughly 570 acres. Approximately 70% of these wetlands, or 399 acres, are located within the waterfront area. The four DEC wetlands located within the study area have been identified as D-57, D-14, D-39 and D-38. 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 waterfront, such as those at Beacon and Asprion Roads, and Wemple Road (see Map 5: Natural, Recreational, Cultural and Historical Resources). There are no known threats of development associated with these wetland areas.

⁵ New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources, New York Natural Heritage Program

Steep Slopes - Steep slopes are found throughout the Town, with the majority of such slopes found in the waterfront area (see Map 5: Natural, Recreational, Cultural and Historical Resources). It is not impossible to build on these areas of steep slopes 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 discourages 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).

There are no identified Coastal Erosion Hazard areas in the WRA.

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, the effects of climate change 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 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).

Soils - 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 waterfront area (Map 6: Soils). Approximately 9.7%, or 1,128 acres of the land in the waterfront area is comprised completely of hydric soil. These soils pose severe limitations to development due to their poor drainage. High water tables, depth to the bedrock, large stones, slope, shrink-swell potential, and the ease of excavation and construction cause this severe limit. Current development regulations in the Town protect these areas through the Town's review process.

The vast majority of the waterfront area 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. It is of note that public sewer and water do not service these sections of the waterfront. The map also indicates the presence of Karst approximately ½ mile to the west of the WRA

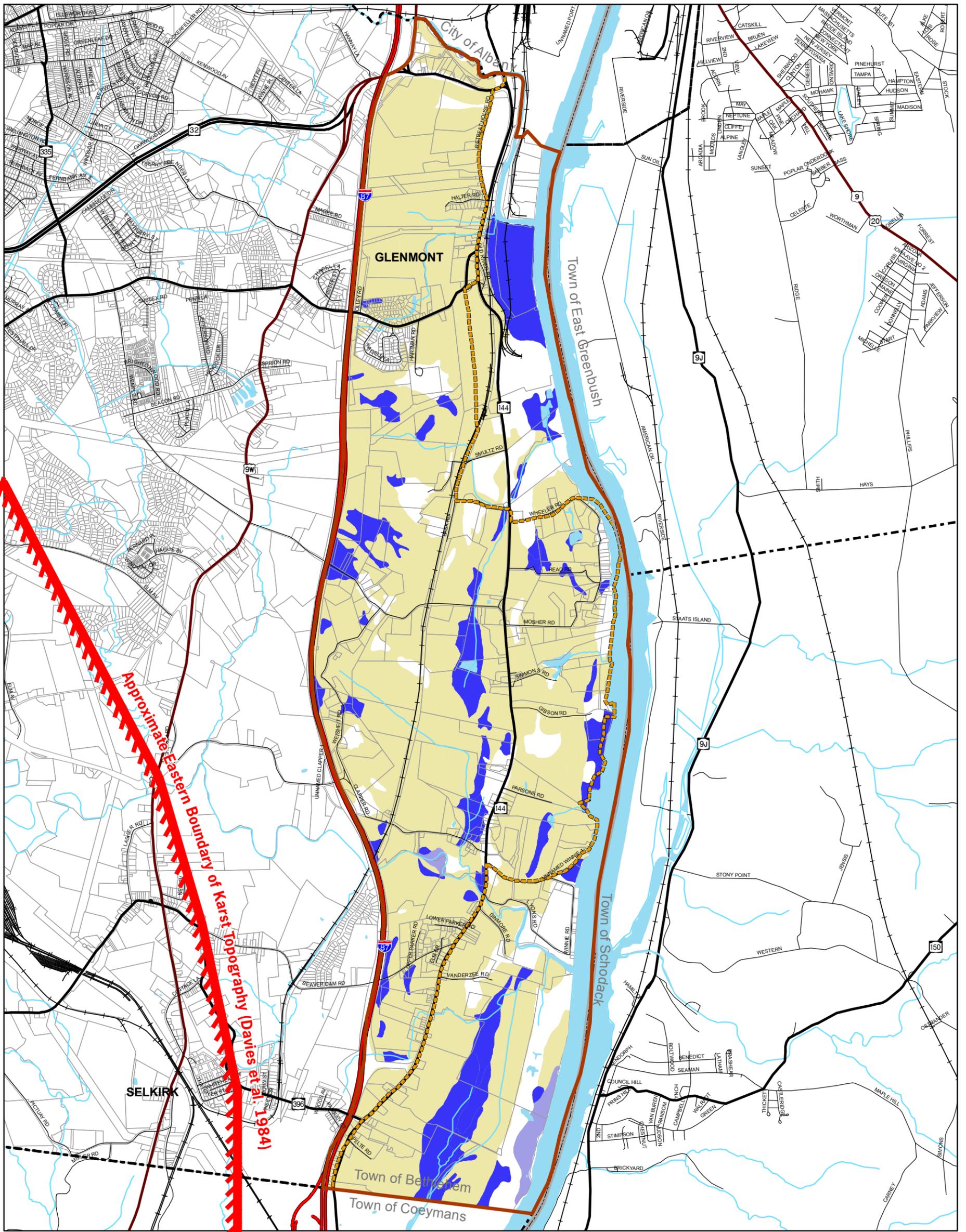
boundary. Karst is a distinctive topography in which the landscape is predominantly comprised of slow dissolving sedimentary rock such as limestone.

Agricultural Soils - The United States Department of Agriculture Natural Resources Conservation Service 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. The waterfront area contains 1,880 acres of prime farmland soils, of which, 570 acres are located on lands involved in agriculture or farming (Map 7: Agricultural Resources).

“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. In the waterfront area, 530 acres are classified as Farmland of Statewide Importance. Approximately 80 acres are located on lands involved in agriculture or farming. The Town of Bethlehem is part of Albany County Agricultural District #3. Agricultural district boundaries have been identified on Map 7: Agricultural Resources.

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 Riverfront Districts portions of the waterfront area.

Map 6: Soils



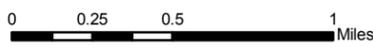
SOILS

Local Waterfront Revitalization Program

May 2010

KEY

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



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File Location: B:\06127\Riverfront_LWRP_SOILS.mxd

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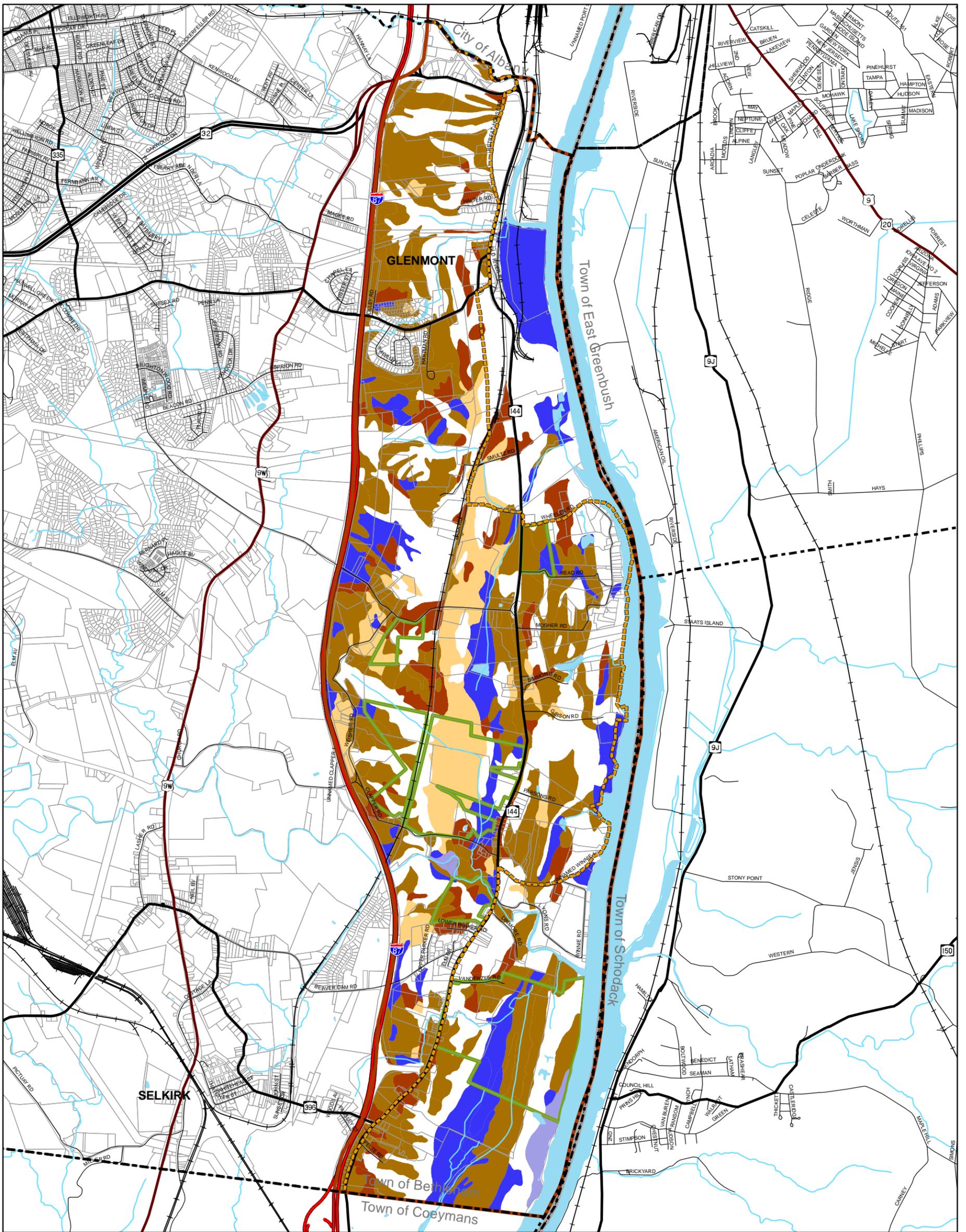
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NEW YORK CITY > SARATOGA SPRINGS



TOWN OF BETHLEHEM

Map 7: Agricultural Resources



AGRICULTURAL RESOURCES

Local Waterfront Revitalization Program

July 2008

- 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



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

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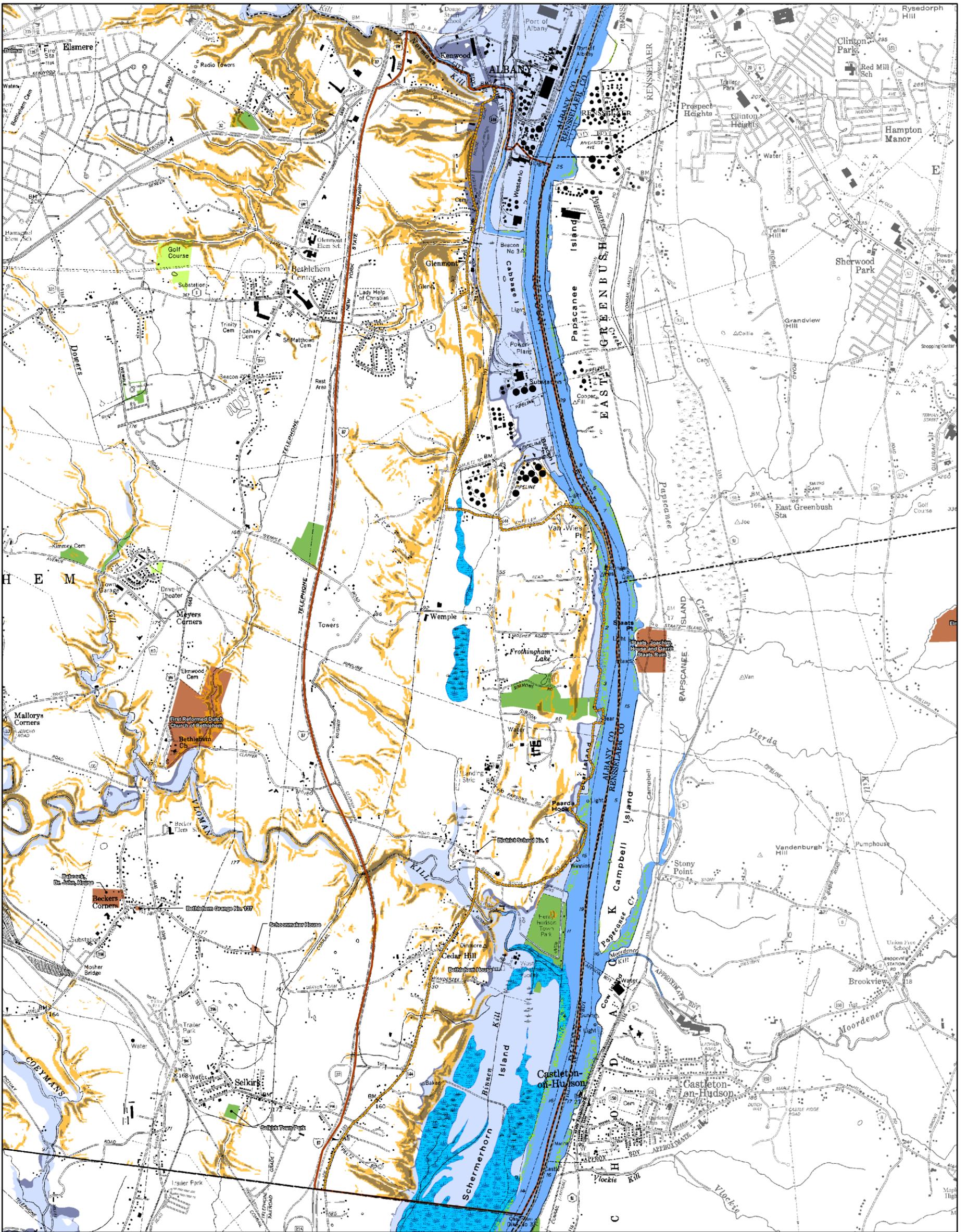
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TOWN OF BETHLEHEM

***Map 5: Natural, Recreational, Cultural and Historical
Resources***



NATURAL, RECREATIONAL, CULTURAL & HISTORICAL RESOURCES

Town of Bethlehem
Local Waterfront
Revitalization Program
May 2010

KEY

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

0 0.25 0.5 1 Miles

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File Location: B:\06127\11x17_LWRP_WRA_NatRes_Cult_Rec.mxd

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**TOWN OF
BETHLEHEM**

N. FISH AND WILDLIFE RESOURCES

Significant Fish and Wildlife Habitats - 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. To designate these habitats, the New York State Department of Environmental Conservation (DEC) evaluates the significance of the habitat areas, and following a recommendation from the DEC, the Department of State designates and maps specific areas. A full description and associated maps of the significant fish and wildlife habitats for the study area are provided in Appendix D.

There are two Significant Habitats within Bethlehem's stretch of the river. These habitats are: The Normans Kill, adjacent to the City of Albany, and the Shad and Schermerhorn Islands that span the border between the Town of Coeymans and the Town of Bethlehem.

(a) Normanskill - The Normans Kill is located on the boundary between the City of Albany and the Town of Bethlehem. This habitat is an approximate two mile segment of this freshwater tributary, extending from its mouth on the Hudson River to a falls which is located just downstream from the New York State Thruway (Interstate Route 87) bridge. The Normans Kill is a relatively large, medium gradient, perennial, warmwater stream, with a drainage area of over 170 square miles, and an average annual discharge volume of approximately 150 cubic feet per second. Municipal water withdrawals upstream reduce flows year-round by more than 7 cubic feet per second. The first mile of stream below the falls flows through a steep-sided wooded gorge, and is relatively shallow, with a gravelly substrate. The lower mile of the creek (referred to as "Island Creek") is within the tidal range of the Hudson River, and is relatively deep, with a silt and clay substrate. At least part of this segment appears to have been channelized in the past, in conjunction with nearby commercial and industrial developments. Despite its proximity to the Port of Albany, the Normans Kill and its associated riparian zone remain in a relatively natural condition. Habitat disturbance in the area is generally limited to the presence of road and railroad crossings, litter, and discharges of stormwater runoff from paved areas.

The Normans Kill is the largest tributary stream in Albany County, and is one of about 4 major tributaries emptying into the northern portion of the Hudson River estuary. The considerable length of stream channel accessible to migratory fishes, and the lack of significant human disturbance in the upper portion of the creek, provide favorable habitat conditions for a variety of anadromous as well as resident freshwater fish species. The Normans Kill is an important spawning area for alewife, blueback herring, and white perch; it is one of only 10 significant spawning streams for these anadromous fishes in the upper Hudson River.

Generally, these species enter the stream between April and June; the adults leave the area shortly after spawning, and within several weeks, the eggs have hatched, and larval fish begin moving

downstream to nursery areas in the Hudson River. A substantial population of smallmouth bass also occurs in the Normans Kill throughout the year. Adults move into the upper section of the creek in May and early June to spawn, and return to deeper areas as water temperatures rise. Freshwater inflows from the Normans Kill are also important for maintaining water quality in the Hudson River estuary.

The abundant fisheries resources of the Normans Kill provide significant opportunities for recreational fishing. Although no developed public access facilities exist, the area is popular among Albany County anglers, especially for smallmouth bass fishing during the summer months. Fishing pressure is concentrated on the lower section of the creek, near road crossings.

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.

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 activity that would substantially degrade water quality, increase turbidity or sedimentation, reduce flows, or increase water temperatures in the Normans Kill would result in significant impairment of the habitat. Discharges of sewage or stormwater runoff containing sediments or chemical pollutants (including fertilizers, herbicides, or insecticides) could result in significant impairment of the habitat. Of particular concern are the potential effects of upstream disturbances, including water withdrawals, impoundments, streambed disturbances, and effluent discharges. Barriers to fish migration, whether physical or chemical, would have a significant impact on fish populations in this Creek, as well as in the Hudson River. Habitat disturbances would be most detrimental during fish spawning and incubation periods. Existing woodlands bordering the Normans Kill and its tributaries should be maintained to provide bank cover, soil stabilization, and buffer areas. Development of appropriate public access to the area may be desirable to ensure that adequate opportunities for compatible human uses of the fisheries resources are available.

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.

(b) Shad and Schermerhorn Islands - Shad and Schermerhorn Islands are located approximately one and one-half miles east of the hamlet of Selkirk, on the western shore of the Hudson River, across from the Village of Castleton-on-Hudson. The fish and wildlife habitat is within the Towns of Bethlehem and Coeymans. This area, covering approximately 1000 acres, is comprised of riverine littoral zones, freshwater wetlands, two sizeable tributary streams (the Binnen Kill and Vloman Kill), floodplain forest, cliffs, and active agricultural lands. Portions of the habitat have been modified by dredge spoil disposal. The Vloman Kill is a medium gradient warmwater stream, with a gravelly substrate, and a drainage area of approximately 30 square miles. A sewage treatment plant is located along the south side of this stream near the mouth.

Shad and Schermerhorn Islands are significant because they comprise a relatively large, undeveloped, floodplain ecosystem on the Hudson River. Important littoral zone areas are located between the deepwater channel and the shoreline of the islands. This type of habitat serves as a nursery area for young herring, shad, striped bass, and white perch, as well as spawning and feeding areas for resident freshwater species in the Hudson River.

The Binnen Kill, which flows through the Schermerhorn Island wetlands, and the Vloman Kill, also provide spawning and feeding habitat for American shad, blueback herring, alewife, and white perch, as well as resident freshwater species. The Vloman Kill is one of about 10 tributaries of the upper Hudson which support significant runs of these anadromous species. Terrestrial portions of the area provide quality habitat for a variety of upland wildlife species, including white-tailed deer, ruffed grouse, eastern cottontail, and many passerine bird species. The small wetland areas in and around Shad and Schermerhorn Islands support limited numbers of waterfowl and furbearing mammals. A naturally created sill area helps to keep the wetlands in this area flooded.

Most of the land adjacent to Schermerhorn and Shad Islands is made up of large, privately owned estates. Therefore, access for public use is restricted from the landward side. However, the area is generally accessible by boat, along the Hudson River and in the lower end of the Vloman Kill. This provides access for fishing and waterfowl hunting, primarily by Albany County residents.

As noted in the Normans Kill discussion above, 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.

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.

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. Such plans would help the Town advance its vision and goals for the area. Recommended actions by Scenic Hudson 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, and exploration of the use of conservation easements for protection of the natural characteristic of these lands. Recommended uses by Scenic Hudson include low-intensity recreation and a managed game area.

O. SUMMARY OF ISSUES

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 Key Properties:

- > Redevelopment of the Bohl Excavation site in the Sub-Port District with design guidelines to improve the gateway appearance,
- > Redevelopment of vacant properties in the North Harbor District with “cleaner” industries,

- > Maintenance of existing, and recruitment of new, marine-based industries while providing necessary infrastructure for a marine-based economy
- > Redevelopment of properties in the South Harbor District with marine-based commercial and mixed-use activities and public access opportunities

Protect Scenic Resources

- > Maintain and protect properties of scenic and natural significance in the South Riverfront
- > Maintain the scenic qualities of the riverfront and improve aesthetic qualities of the industrial areas and the gateway

Protect and Restore Habitats and Water Quality

Limit the amount of bulkhead along the shoreline to aid in habitat restoration and conservation

- > Address shoreline damage from commercial vessel wakes
- > Protect and enhance significant habitats along the Bethlehem riverfront
- > Protect and improve water quality by researching cleaner industrial, residential, and municipal discharge practices while collaborating with other Hudson River communities to improve water quality

Public Access

- > Provide an opportunity for public access with a Greenway Trails System, by preserving and expanding contiguous lands with natural, scenic, and/or historic values throughout the riverfront
- > Continue and expand public access to riverfront, including for recreational boating
- > Provide a balance between the marine-based commercial and recreational uses of the river

Section 3

Section 3 - Local Waterfront Revitalization Program Policies

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.
- Policy 2 Preserve historic resources of the waterfront area.
- Policy 3 Enhance visual quality and protect scenic resources in 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, waters, public lands, and public resources of the waterfront area.

WORKING WATERFRONT POLICIES

- Policy 10 Protect water-dependent and water-enhanced uses and promote siting of new water-dependent or water-enhanced uses in suitable locations.
- Policy 11 Promote sustainable use of living aquatic 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.

A. 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 Waterfront Revitalization Area (WRA), 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 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 LWRP 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 should 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:
 - (a) Using building and site design to make beneficial use of a coastal location and associated coastal resources.
 - (b) Minimizing consumption of riverfront lands and potential adverse impacts on natural resources
 - (c) Limiting shoreline alteration and surface water coverage.
 - (d) 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.
 - (e) Attracting people to the Riverfront, as appropriate to the use.
 - (f) Ensuring that design and siting of uses and structures complements the surrounding community and landscape.
 - (g) Use indigenous plants as components of landscape design to improve habitat and water quality, and to lessen water demand.
 - (h) 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 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. Water-dependent uses should be promoted where appropriate and given precedent over other types of development at suitable riverfront sites. Existing water dependent uses to be protected include:

- > dock infrastructure and commercial shipping facilities in the sub-port area,
 - > petroleum storage and refinery facilities
 - > trans-shipment operation
 - > the barge loading dock near the petroleum storage tanks

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

-
- > Scarano boat building facility
 - > commercial shipping
 - > Bethlehem Energy Center
 - > Henry Hudson Park
 - > boat launch and fishing platform
 - > recreational boating, fishing and swimming
 - > submerged oil/gas pipelines southeast of Glenmont and at Bear Island
 - > public water supply facility on the Vloman Kill
 - > wastewater treatment plant in Cedar Hill

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

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

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.

POLICY 2 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. This policy is applicable to the historic resources which are listed on the State and National Register of Historic Places and identified in Section II which include the following:

- > Bethlehem House
- > District School No. 1
- > Schoonmaker House
- > First Reformed Dutch Church of Bethlehem

These resources will be protected and enhanced whenever practically possible.

The intent of this policy is to preserve the historic and archaeological resources of the waterfront area. Concern extends not only to the specific site or resource but to the area adjacent to and around specific sites or resources. The quality of adjacent areas is often critical to maintaining the quality and value of the resource.

2.1 Maximize preservation and retention of historic resources

Preserve the historic character of the resource by protecting historic materials and features or by making repairs using appropriate measures.

Provide for compatible use of the historic resource, while limiting and minimizing alterations to the resource.

Minimize loss of historic resources or historic character when it is not possible to completely preserve the resource.

Relocate historic structures only when the resource cannot be preserved in place.

Allow demolition only where alternatives for retention are not feasible.

Avoid potential adverse impacts of development on nearby historic resources.

2.2 Protect and preserve archaeological resources.

Minimize potential adverse impacts by redesigning projects, reducing direct impacts on the resource, recovering artifacts prior to construction, and documenting the site.

Prohibit appropriation of any object of archaeological or paleontological interest situated on or under lands owned by New York State, except as provided for in Education Law, § 233.

POLICY 3 ENHANCE VISUAL QUALITY AND PROTECT SCENIC RESOURCES IN THE WATERFRONT AREA

Visual quality is a major contributor to the character of the waterfront area, and the primary basis for the public's appreciation. In addition to the scenic natural resources, the variety of cultural elements in the landscape and the interplay of the built and natural environments are of particular importance to visual quality.

The intent of this policy is to protect and enhance visual quality and protect recognized scenic resources of the waterfront area. The policy is applicable to the scenic resources identified in Section II, such as the unique views of the Taconic Mountain Range seen from the Central Riverfront District.

3.1 Protect and improve visual quality throughout 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 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 area:

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

B. NATURAL WATERFRONT POLICIES

POLICY 4 MINIMIZE LOSS OF LIFE, STRUCTURES, AND NATURAL RESOURCES FROM FLOODING AND EROSION.

The Town participates in the National Flood Insurance Program. The flood hazard areas for 100-year floods in the Town of Bethlehem are 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.

Hardening of the shoreline is to be avoided except when alternative means, such as soft engineering alternatives, revegetation, are impractical to protect principal structures or extensive public investment (land, infrastructure, facilities).

Sea level rise relative to the shore is another significant factor in the incidence of erosion and flooding over time. As a result, sea level rise should be considered when projects involving substantial investments of public expenditures are designed.

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. 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.

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.
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.
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

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; or located in an area of extensive public investment.

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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

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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 channels and infrastructure to limit adverse impacts on coastal processes.

The provisions of this policy are applicable to the navigation channel within the Hudson River as well as to infrastructure, such as buoys, docks and boat launches. The Hudson River channel requires periodic dredging which is the responsibility of the United States Army Corps of Engineers.

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

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 indicates that public expenditure for erosion and flood control projects may be warranted in developed centers.

4.6 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, such as the Wastewater Treatment Plant, 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.

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

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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

B. 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. consider modifying existing sewage treatment processes and facilities to provide improved nitrogen removal capacity;
4. reducing demand on treatment facilities:
 - a. reduce infiltration of excess water in collection and transport systems
 - b. prohibit unauthorized collection system hookups
 - c. pre-treat industrial wastes
 - d. limit discharge volumes and pollutant loadings to or below authorized levels
 - e. encouraging the installation of low-flow water conservation fixtures in all new development.
5. reducing or eliminating combined sewer overflows
6. 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.² Encourage evaluation and implementation of

² A groundwater lens is a layer of fresh water derived from rainfall overlying saline groundwater.

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.

A. 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.

B. 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.

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- 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. Hydro-modifications

- 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 (see Section II: N and Appendix D). In Bethlehem, the Normans Kill, and Shad and Schermerhorn Islands, have been designated as Significant Coastal Fish and Wildlife Habitats.

The standards for this section are to be applied to any activity that is subject to consistency review.

Uses or activities should be avoided which would:

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- > 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:

1. avoidance of potential adverse impacts, including:
 - a. avoiding ecologically sensitive areas
 - b. scheduling activities to avoid vulnerable periods in life cycles or the creation of unfavorable environmental conditions
 - c. preventing fragmentation of intact habitat areas
2. minimization of unavoidable potential adverse impacts, including:
 - a. reducing scale or intensity of use or development
 - b. designing projects to result in the least amount of potential adverse impact
 - c. choosing alternative actions or methods that would lessen potential impact
 - d. specific measures designed to protect habitat values from impacts that cannot be sufficiently avoided or minimized to prevent habitat destruction or significant habitat impairment
3. 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. This policy is applicable to aquatic vegetation, floodplains, soils and wetlands, as described in Section 2: M. Natural Resources and Environmentally Sensitive Resources.

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:
 1. Avoiding placement of fill or excavation of wetlands.
 2. Minimizing adverse impacts resulting from unavoidable fill, excavation or other activities.

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3. 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.
 4. 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 chlorofluorocarbon 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.

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.

Development of the Coastal Area within Bethlehem has resulted in contamination of some riverfront parcels, particularly from industrial activities 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 and solid waste sites, may pose immediate problems and can preclude or delay appropriate reuse of coastal lands. Smaller and more incremental solid waste problems arise from littering.

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 bio-accumulative substances.
2. Avoid re-suspension of toxic pollutants and hazardous substances and wastes and re-entry of bio-accumulative 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.

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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

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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

C. PUBLIC WATERFRONT POLICIES

POLICY 9 PROVIDE FOR PUBLIC ACCESS TO, AND RECREATIONAL USE OF, WATERS, PUBLIC LANDS, AND PUBLIC RESOURCES OF THE WATERFRONT AREA.

The existing waterfront access and recreation that is available to the public is currently limited to the Henry Hudson Park. The LWRP proposes to expand these public access opportunities by developing a variety of improvements to the Park, which are described in Section 4 (Proposed Land and Water Uses: Programs and Projects) and for which many residents expressed a strong desire. One recommendation of the LWRP is to create a riverfront trail along the 10 miles of Hudson Riverfront, recognizing that some portions will need to follow existing roadways. Given the lack of public riverfront access and recreation, this policy incorporates measures to provide that access, throughout the coastal area. First, the need to maintain and improve public access and facilities is necessary to ensure that existing use is optimized, in order to accommodate current 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, with 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:

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- 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.

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. Wherever possible, encourage private development projects to provide public access and/or water-related recreation facilities.

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

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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

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- 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:
 - a. Motorized activities
 - b. Active, non-motorized activities, including water-dependent and water-related uses
 - c. Passive activities
 - d. 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.

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- 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

D. WORKING WATERFRONT POLICIES

POLICY 10 PROTECT WATER-DEPENDENT AND WATER-ENHANCED USES AND PROMOTE SITING OF NEW WATER-DEPENDENT OR WATER-ENHANCED USES IN SUITABLE LOCATIONS.

The intent of this policy is to protect existing water-dependent uses and to promote the future siting of such uses in accordance with the reasonably expected demand. 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 water-dependent uses include:

- > dock infrastructure and commercial shipping facilities in the sub-port area,
 - > petroleum storage and refinery facilities
 - > trans-shipment operation
 - > the barge loading dock near the petroleum storage tanks
 - > Scarano boat building facility
- > commercial shipping
- > Bethlehem Energy Center
- > Henry Hudson Park
 - > boat launch and fishing platform
 - > recreational boating, fishing and swimming
- > submerged oil/gas pipelines southeast of Glenmont and at Bear Island
- > public water supply facility on the Vloman Kill
- > wastewater treatment plant in Cedar Hill

Future water-dependent uses are anticipated to include:

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- > Boating
 - > Large vessel docking
 - > ADA accessible fishing
 - > Riverfront picnicking
 - > Riverfront walking path
 - > Swimming

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 give 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.

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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.

Anticipated or acceptable water-enhanced uses include:

- > Outdoor Theater
- > Concession Stand
- > Restaurants
- > Parks

10.3 Minimize adverse impacts of new and expanding water-dependent uses, provide for their safe operation, and maintain regionally important uses.

Site new and expand existing marinas, yacht clubs, boat yards, and other boating facilities where there is: adequate upland for support facilities and services; sufficient waterside and landside access; appropriate nearshore depth to minimize dredging; suitable water quality classification; minimization of effects on wetlands, shellfish beds, or fish spawning grounds; and adequate water circulation.

Improve protection of natural resources when importing, transshipping, or storing petroleum products by promoting inland storage and offshore transshipment of product.

Maintain regionally important aggregate transshipment facilities.

10.4 Provide sufficient infrastructure for water-dependent uses.

Protect and maintain existing public and private navigation lanes and channels at depths consistent with the needs of water-dependent uses.

Provide new or expanded navigation lanes, channels, and basins when necessary to support water-dependent uses.

Use suitable dredged material for beach nourishment, dune reconstruction, or other beneficial uses.

Avoid placement of dredged material in waterbodies when opportunities for beneficial reuse of the material exist.

Allow placement of suitable dredged material in nearshore locations to advance maritime or port-related functions, provided it is adequately contained and avoids negative impacts on vegetated wetlands and Significant Coastal Fish and Wildlife Habitats.

Avoid shore and water surface uses, which would impede navigation.

Give priority to existing commercial navigation in determining rights to navigable waters.

Provide for services and facilities to facilitate commercial, industrial, and recreational navigation.

Foster water transport for cargo and people.

Maintain stabilized inlets.

10.5 Promote efficient harbor operation.

The western portion of the Hudson River navigation channel lies within the Town's off-shore waters. The provisions of this policy are applicable to addressing issues of both commercial shipping operations and recreational boating along the Hudson River, as described in Section 2.20 (K. Navigation Issues). Key guidelines to achieve this policy are:

- > Limit congestion in harbor waters,
- > Limit conflict among uses, such as between motorized and non-motorized boaters,
- > Foster navigational safety,
- > Minimize large commercial boat traffic wake damage to shoreline and recreational boats,
- > Minimize obstructions in the waterway to reduce potential hazards to navigation,
- > Prohibit any increase or additional use of waterway if such an increase or addition poses a

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- public safety hazard, which cannot be mitigated,
 - > Prohibit intrusions or encroachments upon navigation channels and other identified vessel use areas.

POLICY 11 PROMOTE SUSTAINABLE USE OF LIVING AQUATIC RESOURCES IN THE WATERFRONT AREA.

Although commercial fishing does not exist in Bethlehem, recreational fishing occurs.

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 aquatic resources.

A. Ensure that recreational use of living aquatic resources is managed in a manner that:

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

B. Ensure that the management of the state's trans-boundary and migratory species is consistent with interstate, state-federal, and inter-jurisdictional management plans.

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

1. 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.

D. Foster occurrence and abundance of aquatic resources through:

1. protection of spawning grounds, habitats, and water quality
2. enhancement and restoration of fish and shellfish habitat

11.2 Provide for recreational use of coastal fisheries.

A. Maximize the benefits of resources to provide:

1. valuable recreational resource experience, and

B. 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.

C. Protect public health and marketability of resources from contamination.

1. Advise the public regarding health risks of consuming aquatic plants and animals contaminated with toxics.
2. Restrict harvest of fish and shellfish when they are contaminated with toxics exceeding established public health thresholds.
3. Maintain water quality and wholesomeness of fishery and marketable aquatic resources to protect public health.
4. Foster direct public recreational use of aquatic resources along shorelines, bays, and surface waters.

D. 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. Protection is defined by the Town of Bethlehem Agricultural and Farmland Protection Plan as, “The preservation, conservation, management and improvement of lands which are part of viable farming operations, for the purpose of encouraging such lands to remain in agricultural production.”

This policy includes 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 consistent with the Town’s 2009 Agricultural and Farmland Protection Plan.

The Town Zoning Law defines agriculture and agricultural use as, “The employment of land, including for the primary purpose of obtaining a profit in money, for raising, harvesting, and selling crops, or feeding, including but not limited to grazing, breeding, managing, selling or producing livestock, poultry, fur-bearing animals, or any other horticulture, floriculture or viticulture, aquaculture, hydroponics, silviculture, animal husbandry, or a combination thereof. It also includes the employment of land, including for the primary purpose of obtaining a profit, for staling or training equines, including but not limited to providing riding lessons, training clinics and schooling shows, including other on-farm niche marketing promotions.”

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.

12.2 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.

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. The Town has been evaluating the potential to generate hydroelectric power in the Town's water system at the Fisher Boulevard Pressure Reducing Station, which is located in Slingerlands and at the Stage III stream diversion structure, which diverts water to the Vly Creek Reservoir in New Scotland. At this time, 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

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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 - Proposed Land and Water Uses: Programs and Projects

A. 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.

B. PROPOSED LAND AND WATER USES: PROGRAMS AND PROJECTS 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. When reviewing the proposed uses and projects, 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 (Map 8: Proposed Land and Water Uses).

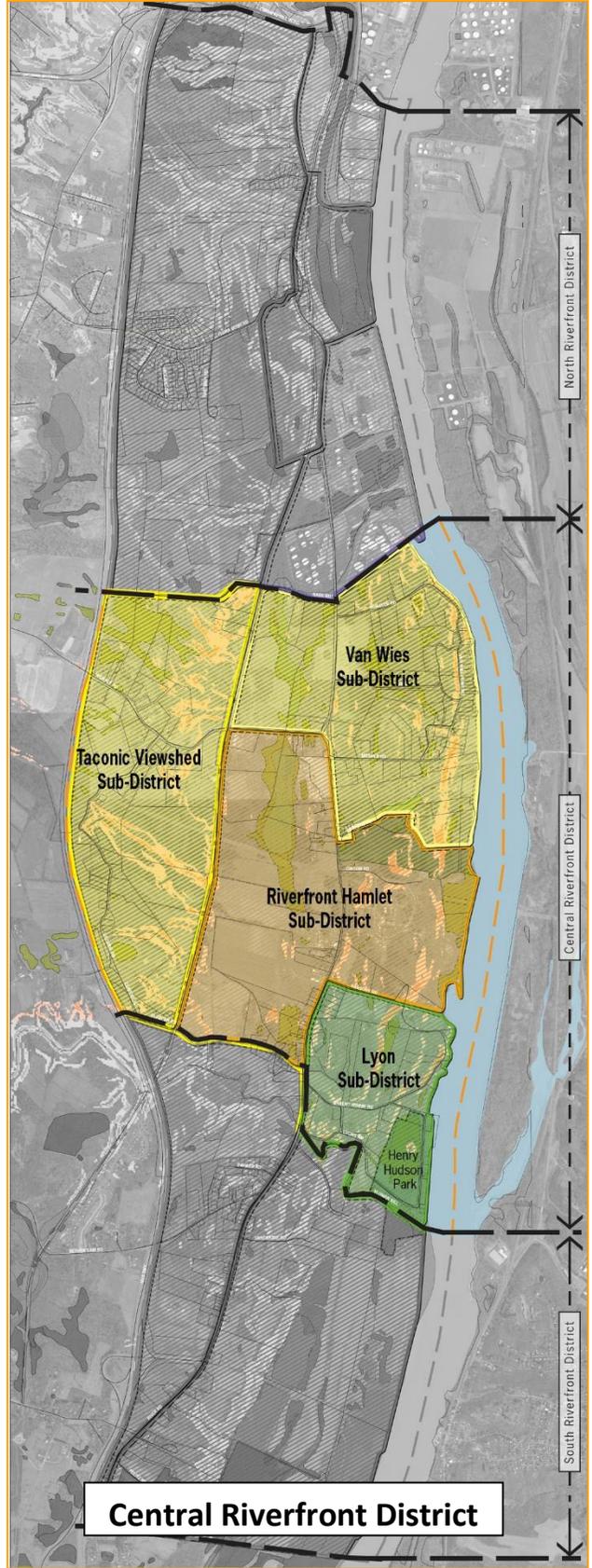
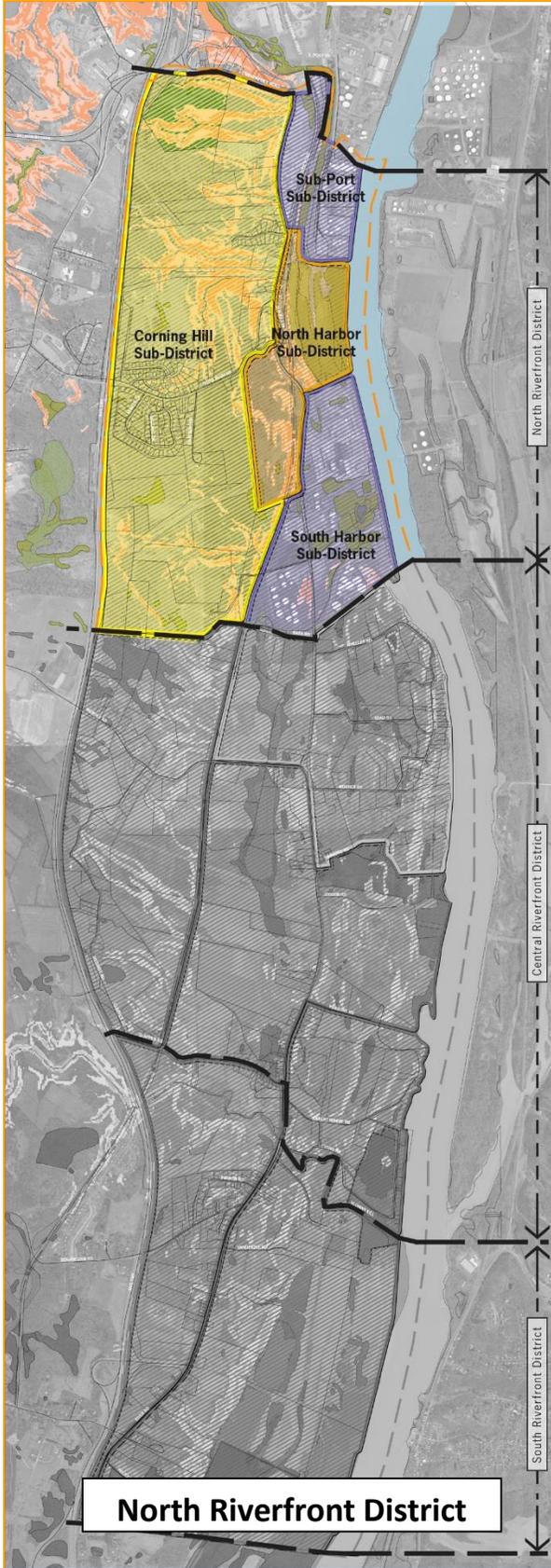
1. North Riverfront District

As a whole, the North Riverfront District benefits from its proximity to the city of Albany, the Albany Port Authority and the NYS Thruway. As presently zoned, the North Riverfront District is expected to emerge as a mixed-use industrial district, taking advantage of its proximity to the Port of Albany, existing railroads, and surrounding land uses. The Heavy Industrial Zoning provides an opportunity for the area to be developed for a variety of appropriate uses in order to promote industrial growth in specifically designated areas, which in turn will help the Town to achieve a balanced tax base.

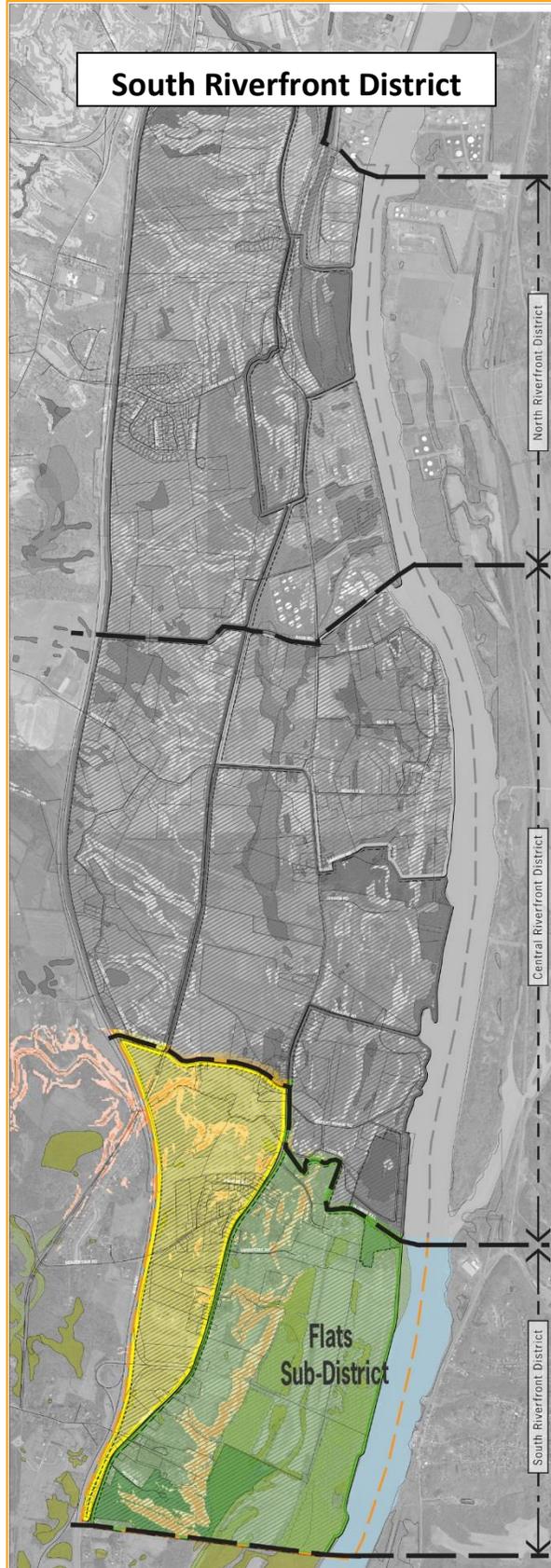
North Riverfront District-wide Programs

Consider use of the State's Brownfield Opportunity Area Program - The Brownfield Opportunity Areas (BOA) Program, administered by the NYS Department of State, is designed to assist communities to foster redevelopment and return dormant and blighted land into productive and catalytic areas while restoring environmental quality. The BOA Program provides grants, of up to 90% of eligible project costs and technical support, to help municipalities and community organizations complete and implement brownfield redevelopment plans for their communities. The support includes brownfield redevelopment planning, access to expert environmental and economic analysis, and environmental site assessment for strategic redevelopment parcels. The North Riverfront District may

Map 9: Riverfront Districts



South Riverfront District



be eligible to participate in the BOA Program since key parcels are presently dormant and would benefit from redevelopment. Brownfield sites include any real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant. 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. The first step involves defining the study area and identifying key properties as potential brownfields. 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, in Step 3, the State provides funding to complete an Implementation Strategy and furnish marketing materials to ensure the success of the District's redevelopment plans. This process, and the information developed, is a good starting point to help inform the Town regarding both the transportation access and infrastructure improvements outlined below.

North Riverfront District-wide Projects

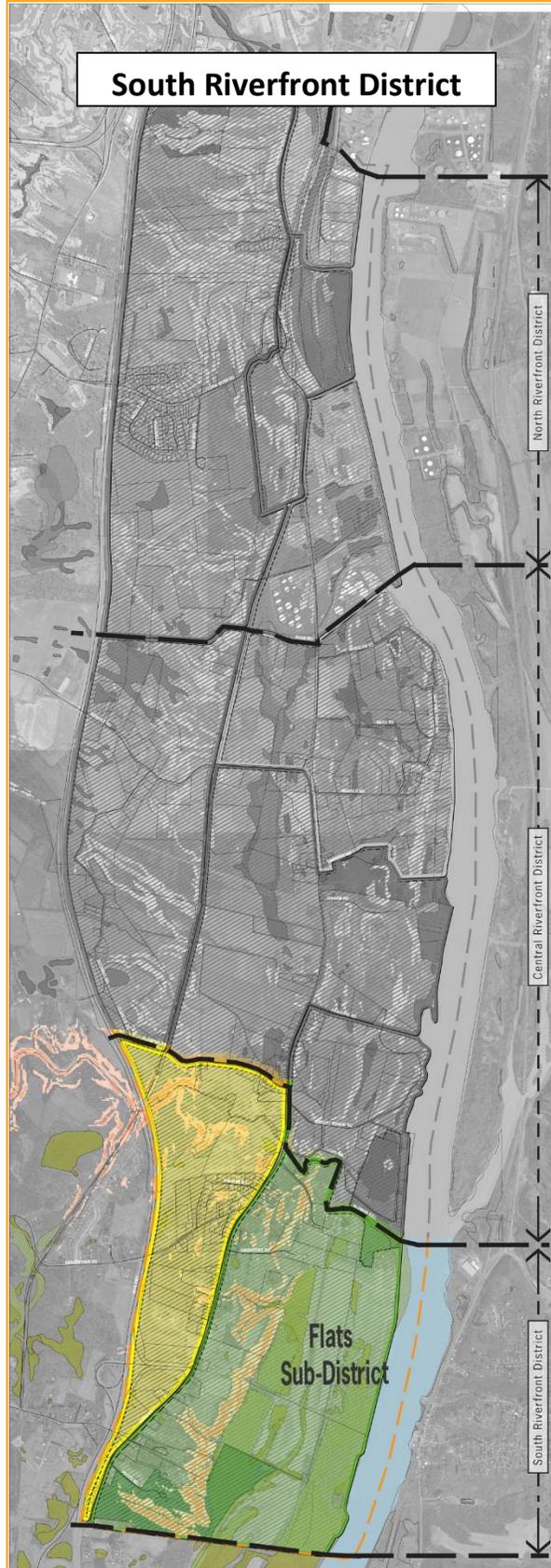
Transportation Access Improvements - Overall transportation access improvements to the North Riverfront Area can lead to improved economic development potential and direct new growth and development to already developed areas. In order to best understand how and where these improvements should be made, the Town should develop an access improvement plan for the North Riverfront District. This plan would be similar in scope to that prepared for the Route 9W corridor.

One of the key issues being faced by many of the sites in the North Riverfront District is the need for improved transportation accessibility. For any redevelopment to be successful in this area special attention should be paid to improving access to the properties along the Route 144 corridor. Capacity improvements along Corning Hill Road may bring vehicles more efficiently and directly to the Route 144 corridor from the Thruway at Exit 23 via US Route 9. Access will also need to be addressed to the sites along the river.

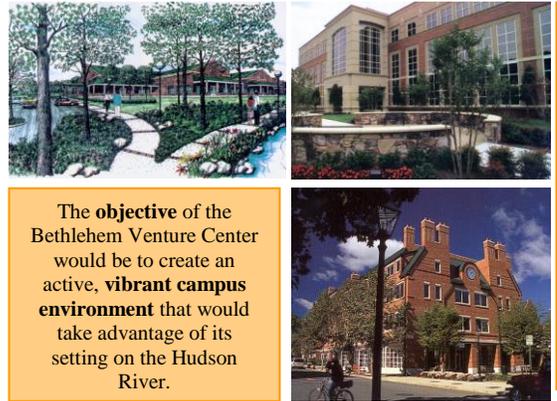
Manage, Maintain and Reinvest in Public Infrastructure - Managing, maintaining and reinvesting in the sewer and water services provided in the North Riverfront District will be an important ingredient to encouraging private sector re-investment in this district. Investing in sewer and water infrastructure 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 –

South Riverfront District



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 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.



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.

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. If specifically proposed, zoning revisions may be necessary that support this type of redevelopment.

a. 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.

b. North Harbor

The North Harbor District will transform from traditional industrial uses to more modern, cleaner industrial uses. It is anticipated that the district will take on a maritime character, with marine-based mixed-use investment, including boat building and repair operations, commercial, entertainment, professional uses and uses that support the Port of Albany.

c. 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, marine-based commercial and mixed-use activities and with public access opportunities.

d. 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



Example of compact, walkable, residential development.

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.

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 Road - 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.

2. 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.

Future 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.

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 LWRP calls 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 the will likely emerge as a master trail plan is implemented.

a. Van Wies

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 the proposed riverfront trail network. Trail connections should be sought to connect the neighborhood with redevelopment of the Town-owned property along Simmons Road.

Van Wies Projects

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.

b. 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. Future development in the district should provide for interpretation and protection of the cultural and environmental aspects of the area, while providing for



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.

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. 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.

c. 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. Proposed park uses include pedestrian and bicycle trails, fishing access, human powered craft boat access and rental, outdoor theater, picnic area, and summer programming and educational outreach. 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.

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 (Map 10: Henry Hudson Park Master Plan). 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. Short-term improvements include:

- > Installation of an ADA accessible fishing pier
- > Perform shoreline stability study and implement recommendations
- > Landscape improvements at Route 144 entrances
- > Improvements to existing bathrooms and picnic areas

-
- > Add picnic tables and BBQ grills, as needed
 - > Create pedestrian access and trail links along Route 144
 - > Create kayak launch on Vloman Kill

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 overall vision for the long-term implementation of the concept outlined here. Long-term improvements include:

- > Develop outdoor theater opportunities
- > Create ADA accessible Woodland walking paths
- > Create great lawn open area
- > Build new pavilions and bathroom/entrance gateway

Evaluate Opportunities to Reduce Odors Emanating from the Wastewater Treatment Plant - The recommendations made for Henry Hudson Park reinforce the park as a significant public gathering space on the Hudson River. However, it has been noted that the Wastewater Treatment Plant located immediately south of the park can detract from the experience at the park, particularly on weekends and holidays; offensive odor emissions associated with the treatment process can cause a nuisance to the enjoyment of the park. It is also recognized that the Wastewater Treatment Plant is a significant infrastructure resource for the community, providing public health, economic and environmental benefits to the community. The Town is currently engaged with an engineering consultant to evaluate long- and short-term improvements needed at the facility and developing a long-term capital program. Part of this study includes an evaluation of odor reduction measures with the goal of striking a balance between the facility's capital and process needs and improved odor emissions.

Develop Trail Connection between Henry Hudson Park and the Town-Owned Property on Simmons Road - 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 development of the Town-owned Moh-He-Con-Nuck Nature Preserve. 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 open 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.

d. 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 toward 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 discusses 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.

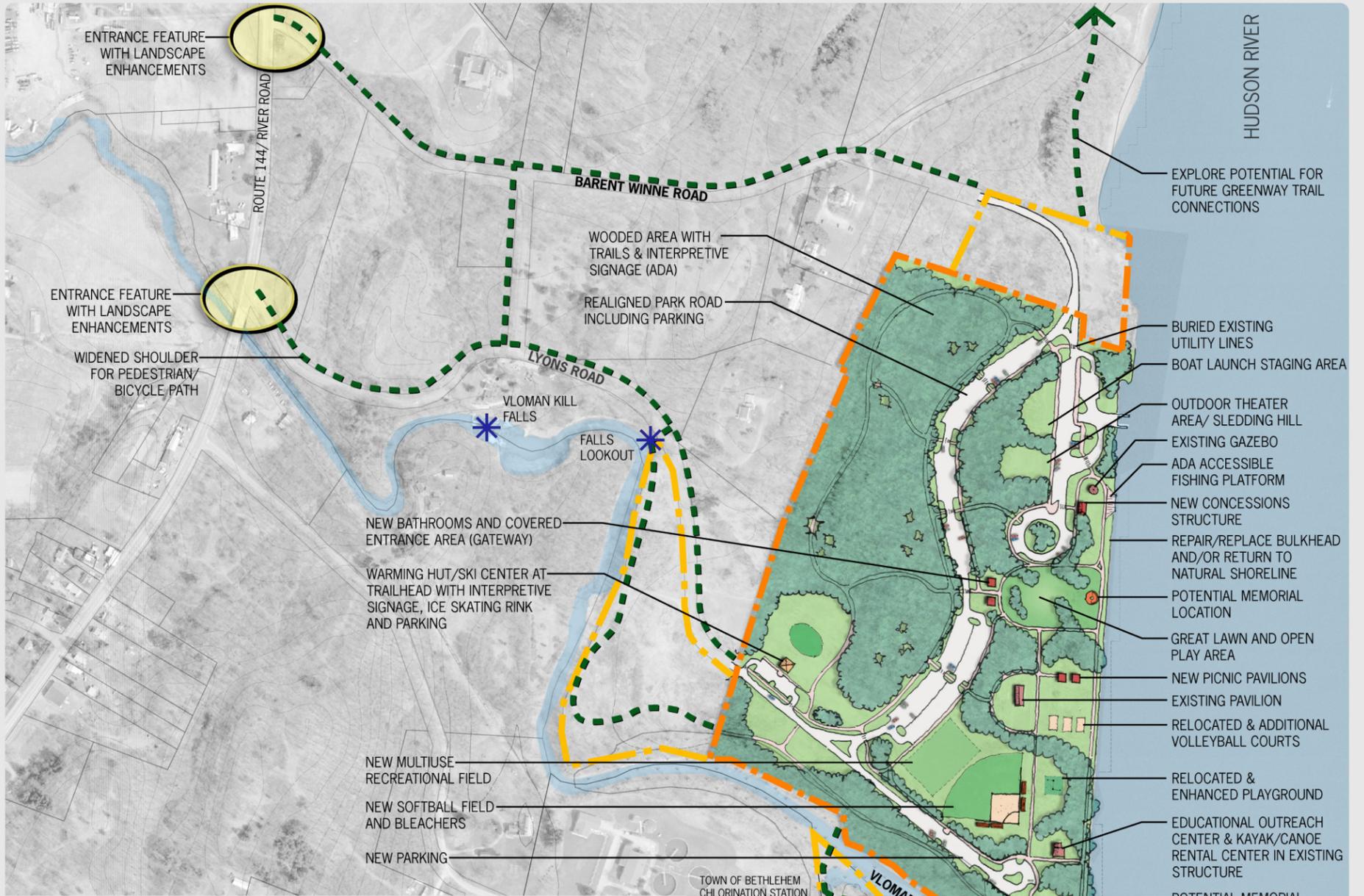
Map 10: Henry Hudson Park Master Plan

BETHLEHEM

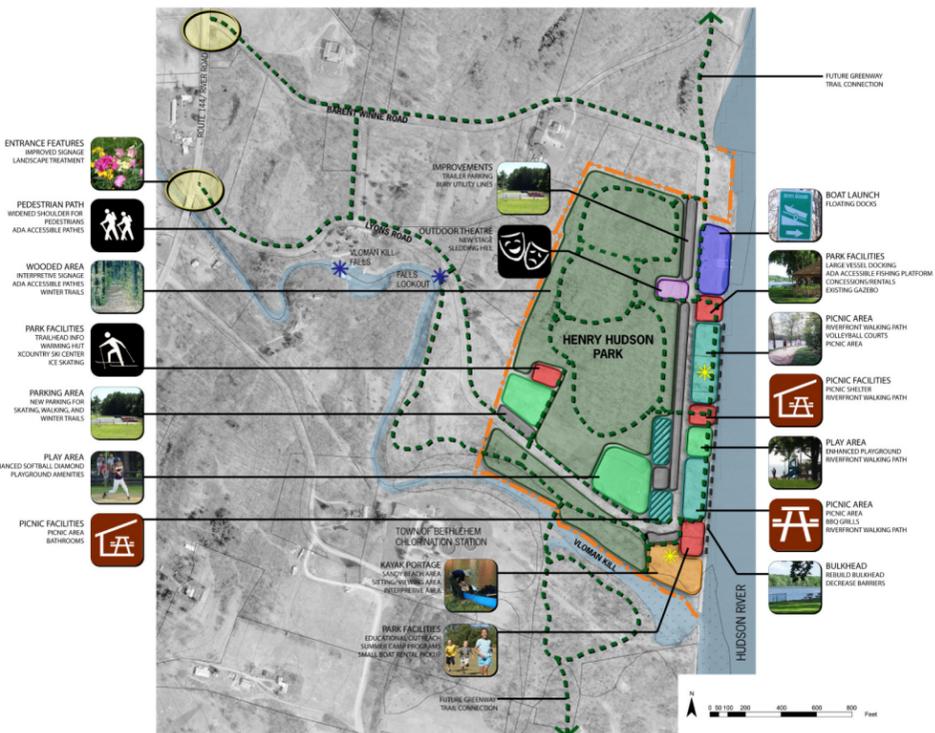
LOCAL WATERFRONT REVITALIZATION PROGRAM

OCTOBER 2007

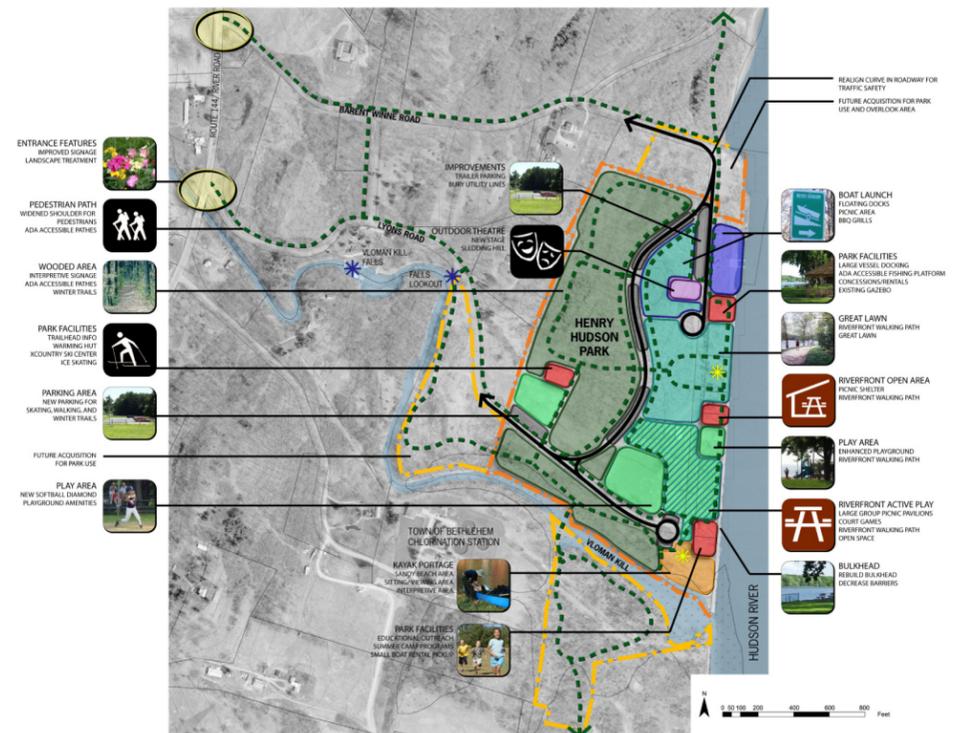
Henry Hudson Park Master Plan



Henry Hudson Park Long Term Master Plan



Short Term Park Program



Long Term Park Program

3. 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 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.

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.

a. 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



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

and nature-based organizations 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. New Netherlands: an Exploration of Past and Present is a good example of a project that educates the public about the region's heritage. The program was created by a Bethlehem Town resident and 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.

4. 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 (PDR) 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

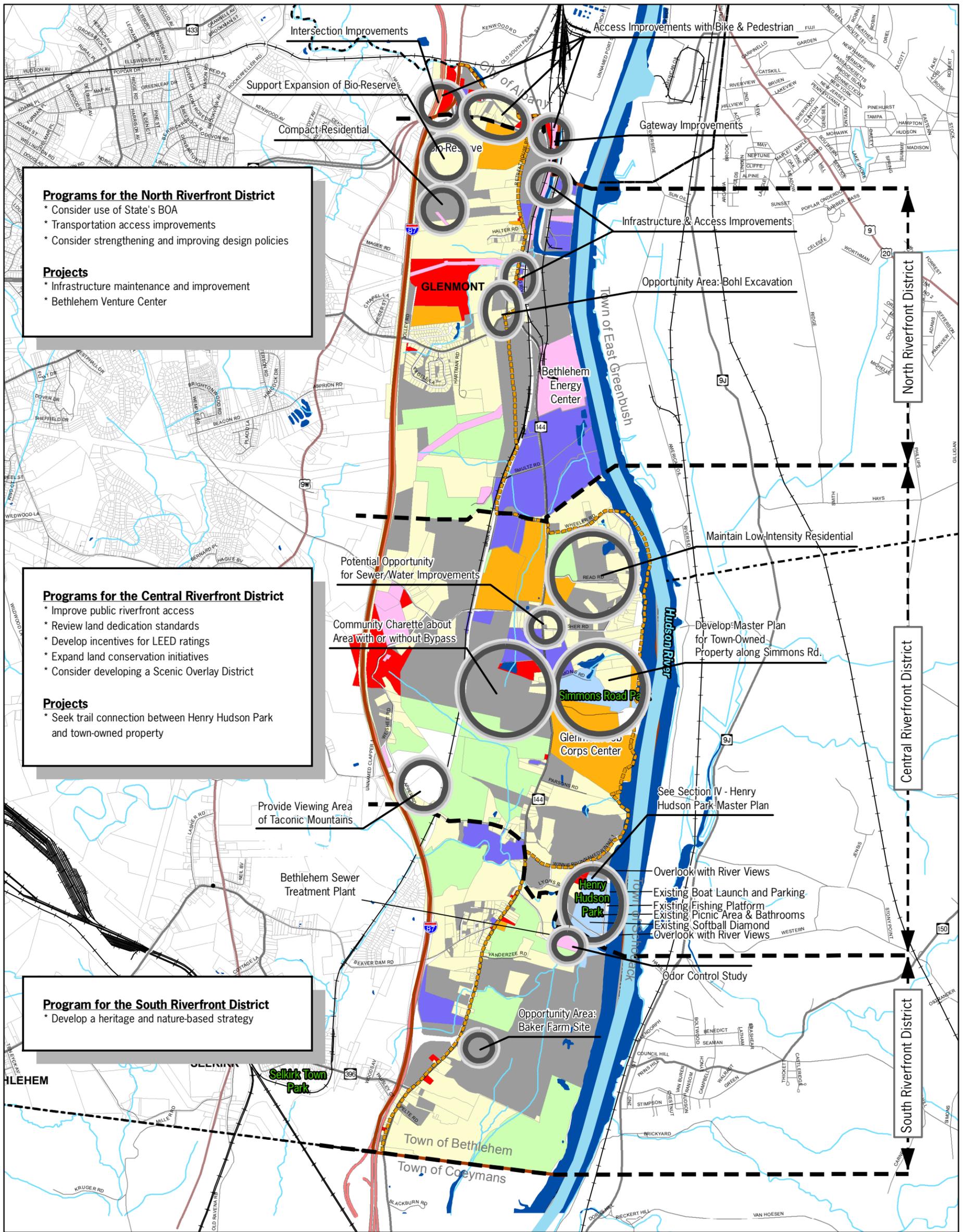
Develop an Integrated Bike and Pedestrian Network along the Corridor - The Town has 10 miles of waterfront along the Hudson River. One of the Value Statements for this LWRP is to create a multi-use recreational network that allows people to safely move along the riverfront. This LWRP begins to outline 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 Mo He Con Nuck Nature Preserve 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. For example, the Paths 4 Bethlehem Committee's Bicycle and Pedestrian Priority Network Map identified River Road, Beaver Dam Road, Clapper Road and Weisheit Road, as the roadways that should accommodate bicycle traffic.

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.

Protect and Restore Habitats and Water Quality – In order to preserve the Town's natural waterfront, the amount of bulkheading along the shoreline should be limited, to aid in habitat restoration and conservation, and shoreline damage from commercial vessel wakes should be addressed. Significant habitats on both the north and south reaches of Bethlehem's riverfront should be protected and enhanced. While collaborating with other Hudson River communities, the Town should protect and improve water quality by researching cleaner industrial, residential, and municipal discharge practices.



Map 8: Proposed Land and Water Uses



Programs for the North Riverfront District

- * Consider use of State's BOA
- * Transportation access improvements
- * Consider strengthening and improving design policies

Projects

- * Infrastructure maintenance and improvement
- * Bethlehem Venture Center

Programs for the Central Riverfront District

- * Improve public riverfront access
- * Review land dedication standards
- * Develop incentives for LEED ratings
- * Expand land conservation initiatives
- * Consider developing a Scenic Overlay District

Projects

- * Seek trail connection between Henry Hudson Park and town-owned property

Program for the South Riverfront District

- * Develop a heritage and nature-based strategy

PROPOSED LAND & WATER USES

Local Waterfront Revitalization Program
May 2010

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
- Navigable Channel of Hudson River

0 0.25 0.5 1 Miles

PROJECT # 2006 - 06127.10P
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NEW YORK CITY > SARATOGA SPRINGS



Section 5

Section 5 - Techniques for Local Implementation

This section describes the techniques for implementation of the Town of Bethlehem LWRP. It describes the land use controls that have been enacted by the Town to implement the policies and projects of the LWRP.

A. LOCAL LAWS AND REGULATIONS NECESSARY TO IMPLEMENT THE LWRP

The Town updated its Zoning Ordinance in 2006, and the local laws and regulations effectively implement the desired goals and policies outlined in this LWRP.

1. Existing Local Laws and Regulations

a. Zoning Regulations

The zoning regulations for the Town establish use districts and regulations applicable to the uses allowed within each district. The zoning regulations establish setback and density requirements, regulate the bulk and arrangement of buildings, the area of lots covered by development and open space, the provision of off-street parking, and the location of accessory structures that support the principal uses and buildings on each property. (See Appendix E for Schedule of uses, area, yard and bulk requirements)

The following zoning districts apply to properties within the LWRP.

Residential Districts

Rural District Zoning District - Areas designated under this district are characterized by working landscapes. Traditionally, these areas have been places where resource-based economic activities have flourished. Rural areas typically have less demand for public services, and, outside of the hamlets, agriculture and forestry have been the primary uses. With its remaining agricultural businesses, undeveloped lands, and natural resources, this portion of the community stands in contrast to the more developed areas of the Town. Its rural character is highly valued by those that live in these areas and it also contributes to the overall quality of life of the Town. The purpose of this district is to encourage a variety of uses, including agriculture, forestry, mining, small-scale commercial and light industrial activity, and development using traditional farmstead designs where appropriate. Design guidelines have been established for this district.

Residential A and Residential B Zoning Districts - Areas designated under these districts are characterized by traditional suburban residential development, including developed single-family dwellings, as well as undeveloped residential building lots. These areas also include active agricultural lands facing immediate growth pressures to convert to nonagricultural uses. The purpose of these districts is to protect the residential viability of established residential settlements. Design guidelines have been established for these districts.

Mixed Use Districts

Rural Hamlet District - Areas designated under this district are typically original settlement areas along major corridors that contain small-scale businesses and essential services in close proximity to rural and moderately developed lands. The rural hamlets tend to be more oriented to vehicular rather than pedestrian access and are less likely to have mixed-use commercial and residential buildings. Rural hamlet districts tend to be adjacent to rural lands and active agricultural uses. The purpose of this district is to encourage compact commercial and residential development in rural neighborhoods throughout the Town. Guidelines have been established for this district.

Rural Riverfront District - Areas designated under this district are those located along areas overlooking the banks of the Hudson River. The purpose of this district is to limit the density of residential development while encouraging tourism and recreational-based nonresidential development.

Design guidelines have been established are to be considered by the Planning Board in the site plan and subdivision review of any new development project involving undeveloped land in the Rural Riverfront District. For redevelopment projects involving the conversion or the rehabilitation of existing structures and previously disturbed land areas, the Planning Board has discretion as to the applicability of these guidelines.

Commercial Districts

Commercial Zoning District - Areas designated under this district are those that contain commercial and nonresidential services and businesses. The purpose of these districts is to encourage the development of a variety of small-scale and large-scale commercial retail and service businesses for the community, including shopping malls.

Mixed Economic Development Zoning District - Areas designated under this district are those with good highway access and which do not presently contain significant agricultural uses. The purpose of this district is to encourage the treatment of individual lots as part of an integrated plan for development of planned office, industry, service, small-scale retail, and technology-based businesses. Residential uses may be permitted as accessory to the nonresidential business development.

A development master plan is required for site plan or subdivision approval for development projects located on a parcel of land of five acres in size or more. Development guidelines for this district have been developed.

Heavy Industrial and Rural Light Industrial Districts - Areas of the Town designated under these districts are those with good highway access and which are deemed appropriate for light and heavy industrial uses. Portions of these areas presently include some limited residential uses, although the dominant uses are manufacturing, assembly, processing and transportation related. The purpose of these districts is to encourage the development of light and heavy industrial uses that require trucking or rail transportation to move goods and materials. Design guidelines have been established.

Floating Districts

Planned Development Districts - These districts are intended as floating zones to provide for new residential uses in which economies of scale or creative architectural or planning concepts may be utilized by a developer. Planned development districts and building projects within planned development districts are established in accordance with a specified procedure.

Residential uses constitute the primary uses permitted in a PDD. Secondary uses may consist of noncommercial religious, recreational, educational or community service uses specifically approved by the Town Board as part of a district plan.

The Town Board shall, at the time of rezoning to PDD, and after recommendation from the Planning Board, establish as part of the district plan for each PDD the permitted land use intensity and/or dwelling unit density for the PDD. Height of a building in planned development districts shall not exceed 40 feet.

Subdivision Regulations

Included within the Town's Subdivision regulations is the provision for Conservation Subdivisions. Through such subdivisions flexibility in the design and development of land is authorized in order to promote its most appropriate use and to preserve as permanent open space important natural features and resources, wildlife habitat, water resources, ecological systems, and scenic areas for the benefit of present and future residents.

A conservation subdivision accomplishes the purposes set forth above by reducing the generally applicable minimum lot size and bulk requirements for the district in which the property is located and by grouping residences in those areas where development would have the least impact on identified natural and community resources. The approved conservation subdivision plat shall identify, with specificity, the location and type of resource(s) to be preserved. The resource(s) shall then be permanently preserved through the use of a conservation easement(s) and/or restrictive covenants as determined by the Planning Board.

b. Agricultural Uses and Right to Farm Regulations

Town of Bethlehem supports the use of land for agricultural purposes and has attempted to provide, to the fullest extent allowed by law, for the protection of agricultural uses and lands suitable for agricultural production. The Town supports the continued operation of active farm operations and has provided, through the regulations of this law and through its Subdivision Regulations, the means for the Planning Board to approve nonagricultural land development subject to such conditions as may be required to assure the long-term viability of active farm operations and agricultural activities by limiting the potential for conflict between established farms and agricultural uses and newly established nonagricultural land uses. The Town 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 Agriculture and Markets Law.

c. Grading, Erosion and Sediment Control Regulations

Uncontrolled disturbance of land and inadequately controlled land clearing activities can lead to failure of slopes and the mass movement of earth; damage to the natural environment, man-made structures and personal safety; and the degradation of aesthetics. In addition, the failure to properly regulate large-scale clear-cutting and land clearing activities, particularly on steep slope areas, has been shown to have dire short-term and long-term impacts on the wetlands, streams, ponds and lakes that make up the unique environmental landscape of the Town. In particular, uncontrolled runoff carrying soil, organic material, and natural and man-made chemicals, metals and toxins has been shown to have the following deleterious effects on the natural and the built environment.

This law requires that all activities involving land disturbance in all areas of the Town are carried out so as to ensure the maximization of benefits to the public and the residents of the Town and the protection of the natural and man-made environment, by ensuring that soil erosion is controlled to the maximum extent practicable.

d. Incentive Zoning

The Town has established a policy of encouraging the preservation of open space and the provision of facilities and amenities that would benefit the Town. This is carried out by providing incentives through density bonuses to applicants seeking approval of a major subdivision plat to develop residential lots within conservation subdivisions, and applicants seeking approval of multifamily development, when such projects preserve open space and provide public facilities and amenities

e. Regulations for Lots Bordering Streams

Building permits are not issued for the construction or installation of any permitted or accessory use in any district within 100 feet of the bank of streams or within the one-hundred-year flood zone of these streams.

f. Parkland Reservation and Fee Requirements

In reviewing residential site plans, residential subdivisions and proposals for planned residential and mixed economic developments, the Planning Board, in the case of site plans and subdivisions, or the Town Board, in the case of planned residential and mixed economic developments, shall ensure that the park and recreation demands generated by new residential development are addressed.

g. Flood Damage Protection Regulations

These regulations promote the public health, safety and general welfare and minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- > Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.
- > Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.

-
- > Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.
 - > Control filling, grading, dredging and other development which may increase erosion or flood damages.
 - > Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.
 - > Qualify for and maintain participation in the National Flood Insurance Program.

h. Freshwater Wetlands Regulations

These regulations specify that within an officially designated wetland, any person proposing to conduct or cause to be conducted an identified activity must obtain a permit from the Town. Actions are subject to these regulations whether or not the actions occur upon the wetland itself, if they impinge upon or otherwise affect the wetlands.

i. Stormwater Management and Erosion and Sediment Control Regulations

Regulations have been established to provide for the health, safety, and general welfare of the citizens of the Town of Bethlehem through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law.

B. PROPOSED LOCAL LAW NECESSARY TO IMPLEMENT THE LWRP

Local Consistency Law (see Appendix F) - A local law will be adopted by the Town under the Waterfront Revitalization and Coastal Resources Act of the State of New York (Article 42, Executive Law) enabling the Town to review its own or any other proposals for activities within the LWRP area. This review ensures that actions are consistent with the policies and purposes of the LWRP.

C. OTHER PUBLIC AND PRIVATE ACTIONS NECESSARY TO IMPLEMENT THE LWRP

There are a number of public and private actions and projects that involve the potential redevelopment of prominent locations in the LWRP area. These actions hold promise in assisting with the revitalization of the waterfront and are fully outlined in Section IV of this program. These actions include:

- > Transportation access improvements along State Route 144
- > Manage, maintain and reinvest in public infrastructure in the North Riverfront District
- > Examine potential for new compact residential development
- > Develop a Transportation Access Plan that provides safe bike and pedestrian connections to the waterfront
- > Examine the need for improved sewer and water connections within the Van Wies area
- > Evaluate odor reduction opportunities at the Wastewater Treatment Plant

D. MANAGEMENT STRUCTURE TO IMPLEMENT THE LWRP

- (a) Local Actions – The Waterfront Consistency Review Law is designed to provide a framework for agencies of the Town of Bethlehem to incorporate the policies of the LWRP when reviewing applications for actions or projects located within the coastal area.
- (b) Procedural Guidelines for Coordinating Review of State and Federal Agency Actions - Proposed State and Federal actions will be reviewed in accordance with guidelines established by the NYS Department of State and set forth in Appendix G.

E. FINANCIAL RESOURCES NECESSARY TO IMPLEMENT THE LWRP

- (a) The Town will continue to budget annually for management and maintenance of its waterfront; facilities (Henry Hudson Park), for administration of the LWRP.
- (b) The Town will apply for state and federal funds (e.g., the state Environmental Protection Fund, Brownfield Opportunity Areas, etc.) to implement components of its LWRP. These funding sources include:

Federal Programs

Department of the Interior

- > Provision of funding under the Land and Water Conservation Fund Program administered by the National Park Service.

State Programs

Department of State

- > Provision of funding for the implementation of an approved LWRP.
- > Funding or partial funding of eligible activities through the Environmental Protection Fund (EPF) administered by the Department of State.
- > Funding to develop revitalization plans and implementation strategies through the Brownfield Opportunity Areas Program.

Office of Parks, Recreation and Historic Preservation

- > Funding or partial funding of eligible activities through the Environmental Protection Fund (EPF) administered by the Office of Parks, Recreation and Historic Preservation.
- > Provision of funding for State and local historic preservation activities.

Section 6

Section 6 - State and 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 and federal 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.

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

Albany Port District Commission (regional agency)

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

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
 - 3.02 Operating Certificate (Alcoholism Facility)
 - 3.03 Operating Certificate (Community Residence)

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- 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)
 - 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

Capital District Transportation Authority (regional agency)

- 1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the Commission.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition.
- 3.00 Increases in special fares for transportation services to public water-related recreation resources.

Office of Children and Family 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)
 - 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 Corrections and Community Supervision

- 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.

Empire State Development/ Empire State Development Corporation

- 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

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- 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
 - 3.00 Administration of Article 5, Section 233 of the Educational Law regarding the removal of archaeological and paleontological objects under the waters of the State.

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
- 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)
- 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)

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- 9.61 River Improvement District Approvals
 - 9.62 River Improvement District Permits
 - 9.63 River Regulatory District approvals
 - 9.64 Well Drilling Certificate of Registration
 - 9.65 401 Water Quality Certification
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- 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.

Greenway Conservancy for the Hudson River Valley (Regional Agency)

- 1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of lands under the jurisdiction of the Conservancy
- 2.00 Financial assistance/grant programs
- 3.00 Model Greenway Program
- 4.00 Greenway Trail Activities

Housing Finance Agency

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

Hudson River Valley Greenway Communities Council (Regional Agency)

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- 1.00 Greenway Planning and Review
 - 2.00 Greenway Compact Activities
 - 3.00 Financial Assistance/Grants Program
 - 4.00 Greenway Trail Activities

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 for People with Developmental 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.

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- 2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
 - 3.00 Funding program for recreational boating, safety and enforcement.
 - 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.
 - 11.00 Planning, construction, rehabilitation, expansion, demolition or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.

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)
 - 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 Appalachian Regional Development Program.
- 2.00 Coastal Management Program.
 - 2.10 Planning, construction, rehabilitation, expansion, demolition or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.
- 3.00 Community Services Block Grant Program.
- 4.00 Permit and approval programs:
 - 4.01 Billiard Room License
 - 4.02 Cemetery Operator
 - 4.03 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.

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- 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.
 - 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

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- (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.

B. 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.

Hudson River Valley Greenway

1. Technical and financial assistance to enhance local land use planning and support of Greenway Criteria.

Greenway Conservancy for the Hudson River Valley-

1. Assistance with the acquisition, disposition, lease or grant of easement related to lands in which the Conservancy has an interest.
2. Assistance with trail development, Hudson River public access projects, and natural and cultural resources.

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.

C. Federal Programs Necessary to Further the LWRP

A. Department of Defense

Corps of Engineers, Buffalo District

1. Review of any proposed action affecting a resource listed on the National Register of Historic Places, pursuant to the National Environmental Protection Act.

- Technical assistance and funding for flood control projects on Big Sister Creek and Fern Brook.
 - Technical assistance and funding for dredging projects at the Sturgeon Point Marina.
- B. Federal Highway Administration
- Funding and technical assistance for the design and construction of additional phases of the Evans Multi-Use Pathway.
- C. Department of Commerce
- Funding and technical assistance for economic development projects in the Lake Erie Beach hamlet area.
- D. Department of Housing and Urban Development
Office of the Assistant Secretary for Community Planning and Development
1. Funding under the Community Development Block Grant Program for improvements in the waterfront.
- E. SMALL BUSINESS ADMINISTRATION
- Funding and technical assistance for local businesses along the waterfront to stimulate economic development.
- F. DEPARTMENT OF THE TREASURY
1. Continuation of Incentives for Qualified Building Rehabilitation.
 2. Provision of appropriate tax-exempt status for non-profit agencies active in the coastal area.
- G. ECONOMIC DEVELOPMENT ADMINISTRATION
1. Assistance under the Public Works and Economic Development Act for street improvements.

D. Federal Activities Affecting Land and Water Uses and Natural Resources in the Coastal Zone of New York State

I. ACTIVITIES UNDERTAKEN DIRECTLY BY OR ON BEHALF OF FEDERAL AGENCIES

The following activities, undertaken directly by or on behalf of the identified federal agencies, are subject to the consistency provision of the Coastal Zone Management Act, its implementing regulations in 15 CFR Part 930, Subpart C, and the New York Coastal Management Program.

DEPARTMENT OF COMMERCE

National Marine Fisheries Services

1.00 Fisheries Management Plans

DEPARTMENT OF DEFENSE

Army Corps of Engineers

1.00 Proposed authorizations for dredging, channel improvements, breakwaters, other navigational works, or erosion control structures, beach replenishment, dams or flood control works, ice management practices

and activities, and other projects with potential to impact coastal lands and waters.

- 2.00 Land acquisition for spoil disposal or other purposes.
- 3.00 Selection of open water disposal sites.

Army, Navy and Air Force

- 4.00 Location, design, and acquisition of new or expanded defense installations (active or reserve status, including associated housing, transportation or other facilities).
- 5.00 Plans, procedures and facilities for landing or storage use zones.
- 6.00 Establishment of impact, compatibility or restricted use zones.

DEPARTMENT OF ENERGY

- 1.00 Prohibition orders.

GENERAL SERVICES ADMINISTRATION

- 1.00 Acquisition, location and design of proposed Federal Government property or buildings, whether leased or owned by the Federal Government.
- 2.00 Disposition of Federal surplus lands and structures.

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

- 2.00 Location and design, construction or enlargement of Coast Guard stations, bases, and lighthouses.
- 3.00 Location, placement or removal of navigation devices which are not part of the routine operations under the Aids to Navigation Program (ATON).
- 4.00 Expansion, abandonment, designation or anchorages, lightening areas or shipping lanes and ice management practices and activities.

DEPARTMENT OF INTERIOR

Fish and Wildlife Service

- 1.00 Management of National Wildlife refuges and proposed acquisitions.

Mineral Management Service

- 2.00 OCS lease sale activities including tract selection, lease sale stipulations, etc.

National Park Service

- 3.00 National Park and Seashore management and proposed acquisitions.

DEPARTMENT OF TRANSPORTATION

Amtrak, Conrail

- 1.00 Expansions, curtailments, new construction, upgrading or abandonments or railroad facilities or services, in or affecting the State's coastal area.

Federal Aviation Administration

- 5.00 Location and design, construction, maintenance, and demolition of Federal aids to air navigation.

Federal Highway Administration

- 6.00 Highway construction.

St. Lawrence Seaway Development Corporation

- 7.00 Acquisition, location, design, improvement and construction of new and existing facilities for the operation of the Seaway, including traffic safety, traffic control and length of navigation season.

FEDERAL LICENSES, PERMITS, AND OTHER FORMS OF APPROVAL OR AUTHORIZATION

The following activities, requiring permits, or other forms of authorization or approval from federal agencies, are subject to the consistency provisions of the Coastal Zone Management Act, its implementing regulations in 15 CFR Part 930, Subpart D, and the New York Coastal Management Program.

DEPARTMENT OF DEFENSE

Army Corps of Engineers

- 1.00 Construction of dams, dikes or ditches across navigable waters, or obstruction or alteration of navigable waters required under Sections 9 and 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401, 403).
- 2.00 Establishment of harbor lines pursuant to Section 11 of the Rivers and Harbors Act of 1899 (33 U.S.C. 404, 405).
- 3.00 Occupation of seawall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the U.S. pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408).
- 4.00 Approval of plans for improvements made at private expense under Corps supervision pursuant to the Rivers and Harbors Act of 1902 (33 U.S.C. 565).
- 5.00 Disposal of dredged spoils into the waters of the U.S., pursuant to the Clean Water Act, Section 404, (33 U.S.C. 1344).
- 6.00 All actions for which permits are required pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 7.00 Construction of artificial islands and fixed structures in Long Island Sound pursuant to Section 4(f) of the River and Harbors Act of 1912 (33 U.S.C.).

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

- 3.00 Licenses for non-Federal hydroelectric projects and primary transmission lines under Sections 3(11), 4(e) and 15 of the Federal Power Act (16 U.S.C. 796(11), 797(11) and 808).
- 4.00 Orders for interconnection of electric transmission facilities under Section 202(b) of the Federal Power Act (15 U.S.C. 824a(b)).
- 5.00 Certificates for the construction and operation of interstate natural gas pipeline facilities, including both pipelines and terminal facilities under Section 7(c) of the Natural Gas Act (15 U.S.C. 717f(c)).
- 6.00 Permission and approval for the abandonment of natural gas pipeline facilities under Section 7(b) of the Natural Gas Act (15 U.S.C. 717f(b)).

ENVIRONMENTAL PROTECTION AGENCY

- 1.00 NPDES permits and other permits for Federal installations, discharges in contiguous zones and ocean waters, sludge runoff and aquaculture permits pursuant to Section 401, 402, 403, 405, and 318 of the Federal Water Pollution Control Act of 1972 (33 U.S.C. 1341, 1342, 1343, and 1328).

-
- 2.00 Permits pursuant to the Resources Recovery and Conservation Act of 1976.
 - 3.00 Permits pursuant to the underground injection control program under Section 1424 of the Safe Water Drinking Water Act (42 U.S.C. 300h-c).
 - 4.00 Permits pursuant to the Clean Air Act of 1976 (42 U.S.C. 1857).

DEPARTMENT OF INTERIOR

Fish and Wildlife Services

- 1.00 Endangered species permits pursuant to the Endangered Species Act (16 U.S.C. 153(a)).

Bureau of Ocean Energy Management Regulation and Enforcement

- 2.00 Permits to drill, rights of use and easements for construction and maintenance of pipelines, gathering and flow lines and associated structures pursuant to 43 U.S.C. 1334, exploration and development plans, and any other permits or authorizations granted for activities described in detail in OCS exploration, development, and production plans.
- 3.00 Permits required for pipelines crossing federal lands, including OCS lands, and associated activities pursuant to the OCS Lands Act (43 U.S.C. 1334) and 43 U.S.C. 931 (c) and 20 U.S.C. 185.

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

- 1.00 Construction or modification of bridges, causeways or pipelines over navigable waters pursuant to 49 U.S.C. 1455.
- 2.00 Permits for Deepwater Ports pursuant to the Deepwater Ports Act of 1974 (33 U.S.C. 1501).

DEPARTMENT OF TRANSPORTATION

- 1.0 Construction or modification of bridges, causeways or pipelines over navigable waters pursuant to 49 USC 1455
- 2.0 Permits for Deepwater Ports pursuant to the Deepwater Ports Act of 1974 (33USC 1501)

Federal Aviation Administration

- 3.00 Permits and licenses for construction, operation or alteration of airports.

FEDERAL FINANCIAL ASSISTANCE TO STATE AND LOCAL GOVERNMENTS*

The following activities, involving financial assistance from federal agencies to state and local governments, are subject to the consistency provisions of the Coastal Zone Management Act, its implementing regulations in 15 CFR Part 930, Subpart F, and the New York State Coastal Management Program. When these activities involve financial assistance for entities other than State and local government, the activities are subject to the consistency provisions of 15 CFR Part 930, Subpart C.

DEPARTMENT OF AGRICULTURE

- 10.068 Rural Clean Water Program
- 10.409 Irrigation, Drainage, and Other Soil and Water Conservation Loans
- 10.410 Low to Moderate Income Housing Loans
- 10.411 Rural Housing Site Loans

-
- 10.413 Recreation Facility Loans
 - 10.414 Resource Conservation and Development Loans
 - 10.415 Rural Renting Housing Loans
 - 10.416 Soil and Water Loans
 - 10.418 Water and Waste Disposal Systems for Rural Communities
 - 10.422 Business and Industrial Loans
 - 10.424 Industrial Development Grants
 - 10.426 Area Development Assistance Planning Grants
 - 10.429 Above Moderate Income Housing Loans
 - 10.430 Energy Impacted Area Development Assistance Program
 - 10.901 Resource Conservation and Development
 - 10.902 Soil and Water Conservation
 - 10.904 Watershed Protection and Flood Prevention
 - 10.906 River Basin Surveys and Investigations

DEPARTMENT OF COMMERCE

- 11.300 Economic Development - Grants and Loans for Public Works and Development Facilities
- 11.301 Economic Development - Business Development Assistance
- 11.302 Economic Development - Support for Planning Organizations
- 11.304 Economic Development - State and Local Economic Development Planning
- 11.305 Economic Development - State and Local Economic Development Planning
- 11.307 Special Economic Development and Adjustment Assistance Program - Long Term Economic Deterioration
- 11.308 Grants to States for Supplemental and Basic Funding of Titles I, II, III, IV, and V Activities
- 11.405 Anadromous and Great Lakes Fisheries Conservation
- 11.407 Commercial Fisheries Research and Development
- 11.417 Sea Grant Support
- 11.427 Fisheries Development and Utilization - Research and Demonstration Grants and Cooperative Agreements Program
- 11.501 Development and Promotion of Ports and Inter-modal Transportation
- 11.509 Development and Promotion of Domestic Waterborne Transport Systems

COMMUNITY SERVICES ADMINISTRATION

- 49.002 Community Action
- 49.011 Community Economic Development
- 49.013 State Economic Opportunity Offices
- 49.017 Rural Development Loan Fund
- 49.018 Housing and Community Development (Rural Housing)

ENVIRONMENTAL PROTECTION AGENCY

- 66.001 Air Pollution Control Program Grants
- 66.418 Construction Grants for Wastewater Treatment Works
- 66.426 Water Pollution Control - State and Areawide Water Quality Management Planning Agency
- 66.451 Solid and Hazardous Waste Management Program Support Grants

-
- 66.452 Solid Waste Management Demonstration Grants
 - 66.600 Environmental Protection Consolidated Grants Program Support
Comprehensive Environmental Response, Compensation and Liability
(Super Fund)

GENERAL SERVICES ADMINISTRATION

- 39.002 Disposal of Federal Surplus Real Property

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

- 14.112 Mortgage Insurance - Construction or Substantial Rehabilitation of
Condominium Projects
- 14.115 Mortgage Insurance - Development of Sales Type Cooperative Projects
- 14.117 Mortgage Insurance - Homes
- 14.124 Mortgage Insurance - Investor Sponsored Cooperative Housing
- 14.125 Mortgage Insurance - Land Development and New Communities
- 14.126 Mortgage Insurance - Management Type Cooperative Projects
- 14.127 Mortgage Insurance - Mobile Home Parks
- 14.218 Community Development Block Grants/Entitlement Grants
- 14.219 Community Development Block Grants/Small Cities Program
- 14.221 Urban Development Action Grants
- 14.223 Indian Community Development Block Grant Program

DEPARTMENT OF INTERIOR

- 15.400 Outdoor Recreation - Acquisition, Development and Planning
- 15.402 Outdoor Recreation - Technical Assistance
- 15.403 Disposal of Federal Surplus Real Property for Parks, Recreation, and
Historic Monuments
- 15.411 Historic Preservation Grants-in-Aid
- 15.417 Urban Park and Recreation Recovery Program
- 15.600 Anadromous Fish Conservation
- 15.605 Fish Restoration
- 15.611 Wildlife Restoration
- 15.613 Marine Mammal Grant Program
- 15.802 Minerals Discovery Loan Program
- 15.950 National Water Research and Development Program
- 15.951 Water Resources Research and Technology - Assistance to State Institutes
- 15.952 Water Research and Technology - Matching Funds to State Institutes

SMALL BUSINESS ADMINISTRATION

- 59.012 Small Business Loans
- 59.013 State and Local Development Company Loans
- 59.024 Water Pollution Control Loans
- 59.025 Air Pollution Control Loans
- 59.031 Small Business Pollution Control Financing Guarantee

DEPARTMENT OF TRANSPORTATION

- 20.102 Airport Development Aid Program
- 20.103 Airport Planning Grant Program
- 20.205 Highway Research, Planning, and Construction
- 20.309 Railroad Rehabilitation and Improvement - Guarantee of Obligations
- 20.310 Railroad Rehabilitation and Improvement - Redeemable Preference Shares

20.506 Urban Mass Transportation Demonstration Grants

20.509 Public Transportation for Rural and Small Urban Areas

* Numbers refer to the Catalog of Federal Domestic Assistance Programs, 1980 and its two subsequent updates.

Section 7

Section 7 - 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

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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) has 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 Area, as defined by the Town's Local Waterfront Revitalization Program, is a peaceful, safe and desirable destination that provides 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 and 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.