

CITY OF KINGSTON BROWNFIELD OPPORTUNITY AREA STEP 3 Final Implementation Plan | Volume |

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FINAL BOA PLAN / DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT KINGSTON WATERFRONT BROWNFIELD OPPORTUNITY AREA PLAN (HUDSON RIVERPORT VISION PLAN) CITY OF KINGSTON, ULSTER COUNTY, NEW YORK

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01 EXECUTIVE SUMMARY

This executive summary outlines the key issues, opportunities and challenges on defining an overall conceptual vision for the City of Kingston's Waterfront Brownfield Opportunity Area and the recommendations for Implementation to achieve this vision. This document is the third step in the New York State Brownfield Opportunity Area (BOA) program and is focused on implementation. This document is a draft and is subject to change; an update will be made public after agency review. Key takeaways are provided from the following topics that are further described in this document:

FLEET OBSOLET

USTORIC KINGSTON WATERFRON

- The Brownfield Opportunity Area Program
- BOA Step 2 Nomination Study Findings
- BOA Boundary Extension
- BOA Step 3 Implementation Plan Process and Schedule
- Kingston Background
- Community Engagement
- Design Framework
- Design Strategy
- Implementation Strategy and Compliance
- State Environmental Quality Review (SEQR) Compliance

THE BROWNFIELD OPPORTUNITY AREA PROGRAM

The City of Kingston has worked with community members, partners and New York State agencies to prepare this Step 3 Implementation Plan for the Brownfield Opportunity Area Program (BOA). This New York State Department of State (NYDOS) program was created to assist communities in fostering redevelopment of brownfield properties. It enables local governments and community based organizations to:

- 1 Address a range of problems posed by multiple brownfield sites;
- **2** Develop locally-driven land use strategies, revitalization plans and implementation strategies;
- 3 Improve neighborhoods or portions of communities that have been affected by multiple brownfield sites;
- 4 Build consensus on the future uses of strategic or priority brownfield sites;
- **5** Establish the multi-agency and private-sector partnerships necessary to leverage assistance and investment to revitalize neighborhoods and communities.

The program has three steps that are defined by the NYDOS as: Step 1 - a Prenomination Study, Step 2 - Nomination Study, and Step 3 - Implementation Plan. This document serves as the third step – the Implementation Plan for the Waterfront BOA. As the City and the nation grapple with economic downturn it is more important than ever that they work with the State and Federal governments to maximize access to technical assistance, grant funding and financing incentives to redevelop brownfield sites. The BOA process is also important because it underscores the planning goals of the City that are focused on stimulating compatible redevelopment while protecting public, recreational and water-related or waterdependent commercial access to the waterfront. Nearby communities have faced intense residential development pressure. Taking former productive industrial land out of the mix puts even more pressure on the City to conserve waterfront resources and encourage complementary uses.

BOA STEP 2 NOMINATION STUDY FINDINGS

The BOA Step 2 Nomination Study builds upon and carries forward many of the recommendations from previous planning studies especially the Phase I Site Assessments for strategic sites and the Environmental Site Classification of the majority of sites in the BOA prepared by the Mid-Hudson Land Revitalization Partnership.

These Strategic sites can anchor future development efforts and are key parcels necessary for the overall redevelopment plan to be completed. Based on Phase I Site Assessments, the City of Kingston and its partners identified three priority sites. Phase I Environmental Site Assessments have been completed for four of these sites. While some environmental concerns have been identified and future analysis is necessary, none of the findings represent a substantial obstacle to redevelopment. The three strategic sites identified within the BOA Step 2 Nomination Study are:

- "The Landing;"
- KOSCO Assemblage;
- Millens and Son Scrap Metal Recycling

Other Key BOA Step 2 Nomination Study findings include:

- As part of the BOA planning process, the City commissioned a full parking strategy which found that there is a marginally sufficient supply of parking in the Rondout area and that 1,656-1,956 additional parking spaces may be required at full buildout.
- The BOA is outside an existing, established historic district but is close to the Rondout/ West Strand Historic District and the Chestnut Street Historic District and contains numerous National and State Resister listed historic resources.
- Land immediately adjacent to the Rondout Creek and Hudson River are subject to flooding.
- The Waterfront BOA "underperforms" from a tax base perspective.
- There is a slowing climate for economic development as investors react to national economic trends.
- The preferred future land use plan includes a full range of improvements proposed to support a mixed-use Rondout waterfront including new commercial development, trail and recreational projects, shoreline infrastructure needs, transportation improvements, and support for local museums among other actions.

BOA BOUNDARY EXTENSION

In order to fully create a holistic vision for the revitalization of the Kingston Waterfront it was deemed necessary to expand the BOA Boundary to include an additional 12 parcels, totaling 23.6 acres. This allowed for the inclusion of key sites that are integral to creating a cohesive redevelopment. While the Step 2 Nomination Study provided limited information on some of the properties within the proposed expanded BOA boundary, the formal BOA boundary evaluated in Step 2 did not include these subject parcels. This boundary expansion has been be issued and accepted by NYDOS and this current BOA Step 3 Implementation Plan includes this additional area in its findings and recommendations. As part of the boundary extension two additional strategic sites have been added:

- Noah Hotel Site;
- Block Park & Island Dock (former Block Plant).

BOA STEP 3 IMPLEMENTATION PLAN PROCESS AND SCHEDULE

The Kingston Waterfront BOA Step 3 Implementation Plan sets out to define an overall vision for the Waterfront and a set of recommendations that guide the revitalization. The final Kingston BOA Step 3 Implementation Plan contains the following documentation:

- BOA Nomination
- Revised Executive Summary
- Implementation Strategy
- Final Generic Environmental Impact Statement
- · Redline/Strikeout version of Draft Implementation Strategy

The entirety of the BOA Step 3 Implementation Plan scope of work is 20 Months. The study began in July, 2014 and is scheduled to finish in March, 2016.

COMMUNITY ENGAGEMENT

The strategy for creating a public driven processes included both focused direction from a Steering Committee and outreach to the public with traditional and non-traditional engagement tactics. The success of the revitalization vision and Implementation Strategy is dependent on community engagement early and often.

The Steering Committee comprised of over a dozen key stakeholders and were used to focus issues and provide relevant context to the team. This advisory group was engaged in workshops and small scale meetings to inform design and respond to decisions before public consumption. This group was integral in forming the direction of the revitalization plan.

Most importantly the plan set out to reach a larger audience to not only solicit feedback but to also garner excitement for what the Kingston Waterfront could be. The public was engaged through traditional community presentations but also through digital outreach and non-conventional tactics- such as leading walking tours and setting up information booths at local Kingston Events. Feedback was collected and used to refine ideas as the plan evolved.

Beyond digital outreach there were seven key engagements for the Kingston Waterfront BOA Step 3 Implementation Plan.

- September 16th, 2014 Steering Committee Introduction and Boat Tour on the Clearwater
- October 28th, 2014 Steering Committee Framework Workshop
- February 24th, 2015 Community Presentation and Scoping Session
- March 22nd, 2015 Community Event- Greenline Walking Tour
- June 29th, 2015 Steering Committee Design Update and Management Structure
- August 21st, 2015 Community Event- Night Market
- Mid November 2015 Community Presentation, SEQR Hearing Process

DESIGN FRAMEWORK

The steering committee was engaged to begin the visioning process and unmask the potential of the Kingston Waterfront. Four frameworks were established to evoke excitement, develop ideas, raise concerns and foster momentum towards creating a one of a kind revitalized and realized Kingston Waterfront. The four focused frameworks are:

COHESIVE:

Creating a two-mile holistic, end to end waterfront that provides a variety of unique moments along the way that are tied together with a common language and vision. Using distinct park bookends as anchors that provide local and regional amenities.

CONNECTED:

Creating a waterfront for all by connecting upland, at the waterfront and to the water through physical, visual and social links. Connect to people, to the neighborhoods, to the water, to the history and to nature that makes Kingston special.

VIBRANT:

Creating a sustainable waterfront development that activates the entire area through exciting and innovative land use, programming, branding, character and building typologies.

ACHIEVABLE:

Identifying the opportunities and constraints for implementation of an exciting waterfront vision. Explore the projects that will catalyze revitalization and develop the funding and management to achieve it.

FEEDBACK

In order to facilitate this conversation, a workshop was set up to allow the Steering Committee to engage on each topic and frameworks were issued virtually to the public for comments. Some of the key take-aways were:

- 1 Incorporate some of the other great planning initiatives currently happening around the Rondout, such as the Greenline, to attract local and regional cyclists.
- 2 Make habitat a priority.
- **3** Reinforce existing community and make sure the waterfront is a place for locals as well as visitors.
- 4 Celebrate the culture, history, heritage, and waterfront economy.
- **5** Deal with water and flooding both at the ground and upland to make the waterfront a desirable place to develop and inhabit.
- **6** Host outdoor activities and parks throughout the waterfront to encourage a range of users both locally and regionally.
- 7 Make water quality and environmental concerns a priority.
- 8 A hotel with Hudson views could be a destination draw to pull people the length of the waterfront.
- 9 Water recreation should be a focus along the entire two-mile stretch.
- **10** The sewage treatment plant needs to be addressed visually and efforts need to be made to minimize odor.
- 11 Creating a second access point that doesn't affect boat traffic is needed at Island Dock so people don't have to walk all the way to the end.



FIGURE 01.1 Overall Waterfront Vision

DESIGN STRATEGY

The Hudson Riverport Vision Plan is a long-term structure for revitalization that allows for development to happen naturally overtime within the goals and priorities of the City. It sets out to focus attention and create an exciting view of what the Kingston Waterfront could be in 20+ years. The overall vision for the Hudson Riverport at Kingston is for a resilient, balanced and achievable waterfront district that unlocks the full potential of the neighborhood and excites the community.

The overall landuse strategy is to convert underutilized brownfield sites, vacant lots, vacant buildings and industrial sites with more active uses that create a mixed-use waterfront community for a spectrum of locals and regional users. Key projects along the waterfront are identified to draw people the length of the waterfront and create unique moments that establish a special world class waterfront. These catalytic projects may include:

- Leverage currently planned projects (Irish Cultural Center, Boat Building School);
- Cornell Building Arts and Culture Incubator Space;



- Eco Hotel at Millens & Sons Strategic Site;
- Destination park/playgrounds at Kingston Point Park;
- Island Dock Park;
- Noah Hotel and Island Dock Access Point;
- Mid-Point civic destination and bike center.

The remaining development is focused on quality mixed-use developments that celebrate the character of the Hudson Riverport at Kingston Vision and uses resiliency strategies as part of the cohesive language to establish a vibrant community. The vision is laid out in three distinct zones:

- Zone 1: Resilient Rondout
- Zone 2: Adaptive Edge
- Zone 3: Eco Zone



FIGURE 01.2 Design Strategy zones

ZONE 1: RESILIENT RONDOUT

The Resilient Rondout zone focuses on existing assets and strengthens the cultural legacy of the waterfront. It creates a double-sided Broadway and some larger retail destinations such as an urban grocery store at Spring Street. The strategy is then to draw attention beyond Broadway by creating charming mixed-use fabric that creates a new standard for Hudson Valley Waterfront development. There are opportunities to work, live and play all in a cohesive language that celebrates the water. Key features of this zone may be a new destination public park or other publicly beneficial components at Island Dock, a longterm residential anchor development at Block Park, a 150-key hotel and the revitalization of the Cornell Building as a culture and food incubator.

ZONE 2: ADAPTIVE EDGE

The Adaptive Edge zone sets out to address the serious flooding and remediation concerns that are preventing viable development and revitalization. It uses resiliency as part of the identity and strategy for redevelopment by utilizing a cut and fill method. This allows development parcels to be raised above the floodplain and treats contamination in-situ. Active ground floors such as community retail and maker space help create a lively public interface, while residential units above bring a variety of residents to create a true mixed-use neighborhood at the waterfront. Smaller development footprints are offset by allowing buildings to be built taller (up to four stories) but views remain expansive as the space between developments is kept open.



ZONE 3: ECO ZONE

The Eco Zone promotes wildlife habitat in and around the water and celebrates the larger regional connections to the Hudson River. The idea here is to provide limited development that acts as a focused draw and allows people to interact with nature in unique ways. Some of the key features of the area are restored wetlands, an eco-hotel, an event pavilion, regional playgrounds, and a restored day-liner with trolley access.

PROJECT PHASING

In order to achieve this vision a strategic phasing strategy has been established to balance the need of providing a critical mass without exceeding market absorption. In general the strategy is to focus around Broadway and existing assets in the near term then create distinct destinations to draw people the length of the waterfront. Development is then in-filled as the market demand is established and can be flexible based on trends. The proposed phasing timeline is as follows:

PHASE 0 (0-2 YEARS) – QUICK TACTICAL WINS

In order to gain momentum and raise awareness it is important to have an identity that visitors can connect with the waterfront to show physical improvements and actions associated with the BOA plan.

PHASE 1 (2-5 YEARS) – CENTER AND INVEST.

The goal of this phase is to set the regulatory framework to incentivize revitalization and leverage currently planned projects.

Approximate Total SF 40,500 sf

PHASE 2 (5-10 YEARS) - CONNECT.

Create catalytic projects that develop the market and draw local and regional visitors to the waterfront.

Approximate Total SF 240,000 sf

PHASE 3 (10-20 YEARS) - GROW THE RONDOUT.

Capitalize on new demand and synergies to develop new complete neighborhoods at the waterfront.

Approximate Total SF 757,500 sf

PHASE 4 (20+ YEARS) - LONG-TERM DEVELOPMENT.

The final phase allows a large scale anchor development to capitalize on the success of the established waterfront.

Approximate Total SF 618,250 sf

LONG-TERM BUILD OUT

APPROXIMATE TOTAL SF - 1,656,250 sf

IMPLEMENTATION STRATEGY AND COMPLIANCE

The design standards and guidelines currently in place for the Kingston Waterfront BOA are high-quality, cohesive and comprehensive. Scenic Hudson showcased the Rondout District guidelines as a case study of how to protect maritime character, preserve historic architecture and enhance waterfront connections in its Revitalizing Hudson Riverfronts published in 2010. Overall, Kingston's design standards and guidelines are intended to protect historic and natural assets while encouraging appropriate new development. Some key standards already adopted include requirements to:

- protect scenic quality, water quality and views;
- preserve existing landscapes, trees and vegetation;
- protect historic facades and encourage adaptive reuse of historic structures;
- create mixed-use, mixed-income, walkable neighborhoods;
- cluster and orient buildings to preserve open space;
- emphasize pedestrian connections and buffer parking areas;
- · provide public access and a continuous riverfront esplanade;
- give priority to water-related and water-dependent uses;
- design new construction to be compatible with existing buildings in scale, form, materials, color, and height;
- · and encourage affordable housing.

The current zoning is consistent with and easily accommodates the future land use plan outlined in this implementation plan with potential modifications for additional height on consolidated development footprints to accommodate resiliency and flood control. Few if any changes are anticipated. Likewise the design standards completed in 2003 contemplated the land use pattern that was described in the Local Waterfront Revitalization Plan (LWRP) Waterfront Implementation Plan which remains the foundation of this nomination. The design standards will be reviewed and revised if necessary. No changes to other incentive programs or economic development programs are anticipated.

Management of the Kingston Waterfront BOA Implementation Plan (the BOA Plan) will require cooperation and dedication from many because implementation will span over a more than a 20-year period and will involve a wide variety of projects ranging from public infrastructure, transportation, and open spaces to large-scale private developments and individual properties. This will require not only the active participation of the City of Kingston, Ulster County and New York State, but also of numerous stakeholders from property owners and private developments to existing businesses, residents, community members, and other local organizations. Funds will need to be raised from multiple sources; strategic development sites marketed; incentives negotiated with potential investors; and progress overseen. Successful implementation of the BOA Plan will require a strong management structure to coordinate these efforts and to lead the BOA implementation projects forward.

STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) Compliance

Later in this document the team describes the SEQR process, assesses potential environmental impacts and evaluates alternatives to the proposed action. Potential impacts assessed in the SEQR Chapter include: land use and community character, natural resources, flooding, cultural resources, visual and aesthetic impacts, open space and recreation, transportation, infrastructure, and contamination related issues. The SEQR compliance chapter relies heavily on the inventory of existing conditions prepared in the Step 2 Nomination Study and augments it with information prepared for the extended BOA boundary as well as new data considered for the Step 3 Implementation Strategy. Later, a table is provided to index the required draft GEIS content to their corresponding locations in the BOA Plan.

The environmental assessment has been prepared to meet the requirements of a draft Generic EIS, and as such presents a more general set of existing conditions and analyses than a conventional or project-specific EIS. This assessment defines the Proposed Action in terms of potential implementation projects for redevelopment of the Strategic Sites. Due to the prospective nature of the BOA Plan, the analyses are based on conceptual plans and available information.

Thresholds and criteria for future review are established to help ensure that private development proceeds in accordance with the BOA Plan. This could include supplemental EISs to reflect site-specific impacts that could not adequately be addressed at this time in the BOA Plan/DGEIS. Preparation of this combined BOA Plan/GEIS will facilitate the future assessment of those planned actions. Conditions triggering future SEQR assessments are summarized below:

LAND USE

- If future project-specific proposals for the redevelopment of the Strategic Sites do not meet the specific permitted uses in the current zoning code, or exceed the preferred land use plan, then the proposed development may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.
- If future project-specific proposals for the redevelopment of the Strategic Sites are substantially inconsistent with the Comprehensive Plan or Local Waterfront Implementation Plan, then the proposed development may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.

NATURAL RESOURCES

- Future project-specific proposals that impact wetlands to the extent that require permitting or mitigation may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.
- If project-specific proposals are not designed to meet the applicable requirements of the Flood Hazard Overlay District, then they should be subject to a new project-specific SEQR assessment.

CULTURAL RESOURCES

 Additional consultation with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) will be required for future site-specific redevelopment projects that include ground disturbance or are located in Rondout Creek and/or the Hudson River.

VISUAL IMPACTS

• Once project-specific designs are proposed, an assessment of potential visual impacts should be required for each project proposing structures over 1-2 stories.

OPEN SPACE AND RECREATION

• The proposed change in use of Block Park and Island Dock/former Block Plant, will require legislative approvals and implementation costs not completely addressed by this SEQR assessment and should be subject to further review under SEQR.

TRANSPORTATION

• As project-specific proposals are made for the redevelopment of the Strategic Sites, a more complete assessment of their potential impact to the transportation systems will need to be completed.

INFRASTRUCTURE

- Water: Individual projects that require public infrastructure improvements to deliver adequate water supply to the site to support the project.
- Wastewater: Individual projects that generate wastewater of a volume, rate, or composition that exceeds the capabilities of the local Municipal sanitary sewer system and/or Publicly Owned Treatment Works.
- Stormwater: Eligibility under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities may not be applicable to all BOA redevelopment projects. If not, then projects may require an individual SPDES permit, as well as other Federal, State and local permits.

O2 BROWNFIELD OPPORTUNITY AREA PROGRAM

The Hudson Riverport Vision Plan (Kingston Waterfront Brownfield Opportunity Area Plan) was prepared for the City of Kingston and the New York State Department of State (DOS) with state funds provided through the Brownfields Opportunity Area Program. The Brownfield Opportunity Area (BOA) Program is a New York State Program where the NYDOS provides financial and technical assistance to municipalities and community-based organizations. The BOA Program, made possible by the Environmental Protection Agency's (EPA) Superfund/Brownfield law enacted in October 2003, provides municipalities and community based organizations with assistance for up to 90 percent of the eligible project costs. Funding can be used to complete revitalization plans and implementation strategies for areas affected by the presence of brownfield sites, as well as site assessments for strategic sites.

The program has three steps that are defined by NYDOS: a Pre-nomination Study (Step 1), Nomination Study (Step 2) and Implementation Plan (Step 3).

BOA STEP 1: PRE-NOMINATION STUDY

The Pre-Nomination Study is intended for preliminary findings for communities that lack information about brownfields that are impacting their community. The Pre-Nomination Study provides a preliminary description and analysis of the proposed Brownfield Opportunity Area and it provides a basic and preliminary analysis of the area affected by brownfield sites.

BOA STEP 2: NOMINATION

The Nomination provides an in-depth and thorough description and analysis, including an economic and market trends analysis of existing conditions, opportunities, and reuse potential for properties located in the proposed Brownfield Opportunity Area with an emphasis on the identification and reuse potential of strategic sites that are catalysts for revitalization. The Nomination concludes with a description of key findings and recommendations to advance redevelopment of strategic sites and to revitalize the area.

BOA STEP 3: IMPLEMENTATION STRATEGY

The Implementation Strategy provides a description of the full range of techniques and actions; ranging from those actions and projects that can be undertaken immediately to those which have a longer time-frame, that are necessary to implement the area-wide plan.

The City of Kingston has worked with community members, partners and New York State agencies to complete the Brownfield Opportunity Area Program and has completed Step 1: Pre-Nomination Study (2002) and Step 2: Nomination Study (2011). This document represents the work done in Step 3: Implementation Strategy.

As the City of Kingston attempts to spur economic growth and revitalization of underutilized assets it is more important than ever that they work with the State and Federal governments to maximize access to technical assistance, grant funding and financing incentives to redevelop brownfield sites. The BOA process is also important because it underscores the City's planning goals of stimulating compatible redevelopment while protecting public, recreational and water-related or waterdependent commercial access to the waterfront.

The Kingston Waterfront Brownfield Opportunity Area Plan is a combination of the Step 2 Nomination Study and Step 3 Implementation Study. The Kingston Waterfront Brownfield Opportunity Area Plan is intended to serve as a Draft Generic Environmental Impact Statement (Draft GEIS). The BOA Plan was prepared in conformance with applicable DOS BOA Program Guidance and the State Environmental Quality Review Act implementing regulations (6 NYCRR Part 617).







FIGURE 02.3 The three steps in the BOA program

O3 COMMUNITY ENGAGEMENT

The official beginning of the Community Engagement process began when the team chose a distinct name to call the project for the purpose of social media. "Hudson Riverport at Kingston" was chosen and a Facebook page was created and can be found at: https://www.facebook.com/HudsonRiverport?fref=ts. A Twitter page was also set up under the same name, it can be found at: @hudsonriverport. These two social media pages were created in order to ensure that the public could be involved throughout the process; even between live public engagement opportunities. This sites were used to post notices informing the public of time and location of engagement activities, as well as to post presentation materials from those meetings for those who could not attend. Both of these sites were also avenues for the public to provide comments on all the materials that were presented.

There were five opportunities for the public to engage with the team, and one last Public Meeting remains which will be held on December 1, 2015. The date for this has not been set, but will be posted on the Hudson Riverport social media pages as well as the City of Kingston's website.

The public engagement process for this particular project has been slightly different than what the team has done in the past. Because many of the properties in the BOA Area are privately owned there was a need to coordinate with the owners, while also working with the public to ensure that the plans for the revitalization of the area are agreed upon by the public and ensure that public access and involvement will be a key component if the revitalization.

Another key component of the public engagement process was reaching out to other businesses in the area adjacent to the project, but not located in the actual BOA area. Beginning in August 2014, the Project Team began meeting with community stakeholders to better understand the challenges of the subject site, to seek development ideas, and to solicit feedback on the proposed plans and design interventions. Project team members also interviewed and had meetings with business owners in Kingston and the Hudson Valley to complement the learning from these community stakeholder meetings. The purpose of these interviews and meetings was to discuss real estate market dynamics, whether for the Residential, Retail, Office or Hospitality sectors. The following list, which is not exhaustive, provides a selection of those companies and organizations, whose feedback has been incorporated, whether from community stakeholder meetings or through interviews:

- Armadillo Bar & Grill
- AVR Realty Company
- Diamond Mills Hotel
- Empire State Development
- Fleisher's Craft Butchery
- Gate House Realty
- Hudson Valley Landing
- Kingston Waterfront Business Association
- Kingston Wine Co.
- Morgan Management, LLC
- Olivieri's Arts, Crafts, & Coffee
- The Roundhouse at Beacon Falls

Feedback from the public has been open throughout the process and will be open before the last public meeting on December 1, 2015 and will be open for a time after that. The team and the City feel that there has been ample opportunity for public input throughout this process and that with the implementation of the plans over the next few years the public will be able to see and use the newly revitalized Hudson Riverport at Kingston.

This section provides more details on the Community Engagement Process.

STEERING COMMITTEE MEMBERS

- Alderman Ward 2
- Artist Workspace
- At Home Antiques
- CB Developers
- City of Kingston
- Clearwater
- CLG Consultant
- Community Residents
- Esopus Business Alliance
- Feeney's Shipyard
- Friends of Kingston Waterfront
- Guardia Architects
- Heritage Energy
- Historic Kingston Waterfront
- Honorable Mayor of the City of Kingston
- HRMM
- Hudson River Cruises
- Hudson River Ventures
- Hudson Valley Developers
- Irish Cultural Center Hudson Valley
- Jewish Federation of UC
- Joseph Hurwitz & Associates, Architects
- Kingston CAC
- Kingston City Marina, Harbormaster
- Kingston Fire Department
- Kingston Land Trust
- Kingston Times
- Lyghtforms
- Mariners Harbor
- Merrill Lynch
- Millens Steel
- New Central Baptist
- NYS DOS
- NYSDEC
- Ponckhockie Residents
- R&F Paints
- Reher Center
- Riverview Missionary Baptist Church
- Rondout Consulting
- Rondout Resident
- Rondout Rowing Club
- S. Finkle Associates
- Savona's
- Scenic Hudson
- Ship to Shore
- Steelhouse
- Steelhouse Community Relations
- Town of Esopus
- Trolley Museum of NY
- Ulster County Planning Department



FIGURE 03.4 The team and stakeholders hoisting the sail on the Clearwater

STEERING COMMITTEE INTRODUCTION AND BOAT TOUR ON THE CLEARWATER

In an effort to help the Steering Committee and other key stakeholders meet the BOA Team and be able to better understand the BOA Area a tour was held aboard the Clearwater on September 16th, 2014. This enabled the team to become more familiar with the physical area and with the concerns, plans etc. of the Steering Committee and the local community.



FIGURE 03.5 A breakout group during the Steering Committee Framework Workshop

STEERING COMMITTEE FRAMEWORK WORKSHOP

A meeting with the Steering Committee and the City of Kingston was held on October 28th, 2014. This was the first opportunity for the City and the Steering Committee to give feedback on the initial design strategies that the team has been formulating. The comments and other discussions generated at this time allowed the design team to move forward with a better understanding of what are the best development / design strategies moving forward.



FIGURE 03.6 The team presenting to the community at City Hall



FIGURE 03.7 A breakout group discussing the overall vision of the BOA plan

COMMUNITY PRESENTATION AND SCOPING SESSION

The next public outreach session for the BOA Plan was held on February 24th, 2015. This meeting also served as the public scoping session, as part of the New York State Environmental Quality Review (SEQR) process, was held. During this session the official public comment period was open until March 10th as the public was allowed to see the latest developments and to discuss the proposal design strategies.

STEERING COMMITTEE DESIGN UPDATE AND MANAGEMENT STRUCTURE

The next opportunity for engagement was focused on the possible Management Structure of the BOA Area; it was held on June 29th, 2015. This gave an opportunity for another update on the design progress and for a discussion on the possibilities for management of the Implementation Plan projects.



FIGURE 03.8 The team explaining the vision for Island Dock and Dock Street.

COMMUNITY EVENT - GREENLINE WALKING TOUR

The team was initiated by the Kingston Greenline to co-host a walking tour of the site area on March 22, 2015. The tour included information about key projects within the BOA plan. This allowed the public to better understand the vision of the plan in the context of the actual site and to ask questions.

COMMUNITY EVENT- NIGHT MARKET

The team, along with representatives from the City of Kingston, had an area at the Kingston Night Market held on August 21st, 2015. This gave the public an open forum to ask any questions about the BOA plan.

FALL COMMUNITY PRESENTATION

The final presentation to the public for the BOA Plan is on December 1, 2015. This meeting will serve as the SEQR hearing process.



FIGURE 03.9 The team speaking with community members at the Kingston Night Market

04 BACKGROUND -ENVIRONMENTAL SETTING

The City of Kingston is located on the western bank of the Hudson River approximately 54 miles south of Albany and 104 miles north of New York City. Kingston is the county seat of Ulster County and is a major regional commercial and business center. The significant frontage on the Hudson River and a lengthy and protected shore on Rondout Creek, a major tributary of the Hudson is what makes the City of Kingston so appealing to residents and visitors alike. For over 150 years, a continuous flow of industry including rail yards, boiler facilities, a coal gasification plant, a bulk petroleum facility, and salvage and scrap metal yards have been located along the Rondout Creek. The Hutton Brick Company, Cornell Steamship Company shops (currently used as the Headquarters of Historic Kingston Waterfront and Fleet Obsolete), Steelhouse Restaurant/ Millens Steel building (now famed local restaurateur Butch Guido's Ole Savannah Restaurant), Island Dock, and Feeney's Boatyard remain as evidence of a once-thriving industrial complex. Most of the former industrial sites are being transitioned to commercial public usage (ie expanded Hudson River Maritime Museum). Several of these industries continue today, though the KOSCO oil tanks have been removed on the Kingston side of the Creek. Today, however, increased interest in the City of Kingston and its surrounding area are making the city more appealing for growth and development which will also encourage the clean-up of the former industrial sites in the area. Changing economic conditions have resulted in the abandonment of these historic industries and created opportunities for reuse of a number of sites. Lower Broadway, for example, has been extensively revitalized, creating a vibrant mixed-use area providing shops,



FIGURE 04.1 Regional context

restaurants, homes and offices. Also of importance for the redevelopment of the area is incorporating resiliency strategies to ensure that when the inevitable flooding due to sea level rise and storm surges inundates the area that the new development is prepared and can handle those sort of conditions. The key to the redevelopment of the area is to ensure that the new development will not be ruined by climatic changes and can continue on for many years after implementation is complete.



FIGURE 04.2 Hudson River Valley context

EXPANDED BOA BOUNDARY



FIGURE 04.3 Original and Extended BOA Boundary

PROPOSED EXTENSION OF BOA BOUNDARY

This section of the BOA Plan presents supplemental inventory information supporting the extension of the designated BOA boundary to the west of the original boundary. Since completion of the Step 2 Nomination Study, the BOA Boundary has been proposed to be extended by 12 parcels (23.6 acres - including water area) in order to include several key parcels that might support the redevelopment planning for the Kingston Waterfront. While the Step 2 Nomination Study provided limited information on some of the properties within the proposed expanded BOA boundary, the formal BOA boundary evaluated in Step 2 did not include these subject parcels. The proposed Extended BOA boundary is depicted in relation to the overall BOA Boundary in Figure 04.3.

All the parcels within the proposed extended BOA boundary are either on Rondout Creek or front on Abeel Street. The additional area to be included in the BOA is bounded to the west by the former block plant property on Abeel Street. Abeel Street bounds the subject parcels to the north from the former Block Plant Site at the west to its east end at 144 Abeel Street (abutting the current BOA boundary). Rondout Creek serves as the southern bounds of the proposed extension of the BOA boundary.

The subject parcels have been grouped into five areas based on common ownership or existing use. The parcels in Figure 04.4 are included within the proposed extended boundary which is depicted on Figure 04.3.

Parcel	TAX MAP PARCEL NO.	STREET ADDRESS	PROPERTY OWNER	
Noah Hotel Site				
1	56.43-5-1	144 Abeel Street	Hudson Valley Dev LLC	
2	56.50-6-20	146-168 Abeel Street	C&B Developers LLC	
3	56.50-6-19	146-168 Abeel Street	C&B Developers LLC	
4	56.50-6-18	146-168 Abeel Street	C&B Developers LLC	
5	56.50-6-16	146-168 Abeel Street	C&B Developers LLC	
Hideaway Marina				
6	56.50-6-25	170 Abeel Street	Rondout Holding Co Inc.	
7	56.50-6-24	194-198 Abeel Street	Rondout Holding Co Inc.	
P&T Surplus				
8	56.50-6-14	194 Abeel Street	Rondout Holding Co Inc.	
9	56.50-6-13	198 Abeel Street	Rondout Holding Co Inc.	
Block Park				
10	56.50-6-12	208-304 Abeel Street	City of Kingston	
Former Block Plant and Island Dock				
11	56.50-6-22	308-322 Abeel Street	Historic Kingston Waterfront	
12	56.50-6-11	"Rear Abeel" Street	Historic Kingston Waterfront	
	56.43-5-44	within Step 2 BOA Boundary	Historic Kingston Waterfront	
	56.50-6-21	within Step 2 BOA Boundary	Historic Kingston Waterfront	

FIGURE 04.4 Parcels within the proposed extended boundary

JUSTIFICATION FOR THE PROPOSED CHANGE TO BOA BOUNDARY

Each of the five groupings offers unique opportunities for brownfield redevelopment:

- Sites 1 5 Noah Hotel Site
- Sites 6 7 Hideaway Marina
- Sites 8 9 P&T Surplus
- Site 10 Block Park
- Sites 11-12 Former Block Plant and Island Dock

The proposed area for the BOA boundary extension is an organic extension of the BOA originally studied in Step 2. It includes a group of vacant and underutilized properties previously studied and cleared for redevelopment (the Hotel Site – Sites 1-5). The Hideaway Marina (Sites 6-7) is an existing water-dependent business with excellent access, no major brownfield issues and several ancillary buildings. The P&T Surplus property (sites 8 and 9) is an underutilized property that based on a Phase I Environmental Site Assessment does not have significant contamination concerns.

The Former Block Plant and associated parcels (Sites 11 and 12) are part of the same holdings as Island Dock, which has significant potential for redevelopment as a water-dependent site. Site 12 includes the abandoned Block Plant. The available environmental site assessments for these sites indicated that there is low to moderate potential for degraded environmental conditions. The proposed BOA extension also includes the existing City-owned Block Park (Site 10).

Taken together the 12 subject parcels make a reasonable extension to the Kingston Waterfront BOA which would now incorporate the entire slipway on Rondout Creek up to and including the causeway.

SITE PROFILES

Site Profiles have been prepared for each of the five groupings of parcels within the proposed extended BOA boundary. The site profiles provide: a location map, street address, tax map parcel number, ownership, current land use and condition, existing infrastructure and transportation, natural features, cultural resources, and known environmental conditions and potential contamination issues (based on environmental site assessments conducted for Step 2). For purposes of describing existing conditions, the site profiles for Sites 11 and 12 also include the Island Dock parcels which are under common ownership by Historic Kingston Waterfront.

SUPPORTING DOCUMENTATION FOR BOA DESIGNATION

The final steps of the BOA process is the formal designation of the BOA by the New York Secretary of State, which will give private landowners access to tax incentives for redevelopment of brownfield sites. The findings below are provided in order to support the BOA designation request with information that may not have been included in the Step 2 Nomination Study relevant to the proposed boundary extension.

OWNERSHIP PATTERN

The ownership pattern within the proposed extended BOA boundary is depicted on Figure 04.5 - Private and Public Land Ownership. Of the 12 subject parcels, all but one are privately owned by one of five different landowners. The only exception is the City-owned Block Park.

PROXIMITY TO EXISTING TRANSPORTATION

As seen in Figure 04.59, the primary road access to the subject parcels is via Abeel Street or Dock Street/West Strand Street (from the East). The closest bridge that connects Kingston to the east bank of the Hudson River is approximately four miles to the north (U.S. Highway 9W). 9W runs north-south through Kingston. The nearest airport is the Kingston –Ulster airport, situated near the Kingston-Rhinecliff Bridge. There is a water taxi service which operates between Kingston and Rhinecliff



FIGURE 04.5 Public/Private Ownership Pattern

OWNER

Armstrong, Nathan	Kgn Point Terminal	Sensini , Aldo
B Millens & Son Inc	Manatee LLC	VanWert, Brenda
Blue, John	Martin, Lloyd	Vivianni, Catello
Central Hudson Corp	Melke Land Co LLC	Washington, Hattie
City of Kingston	Millens, Barney	Wolfeil, Bruce
Historic Kgn Waterfront LLC	Mohegan Vista Prop LP	Wolfeil, Craig
Jackson, Fred B	Nauta, Gary	Wolfeil, Craig P
Jacobson, Amy	New Central Bap Church	Wolfeil, Frank
JAF Partners Inc	ONeil, Judy	Wolfeil, James
JKJ Properties LLC	Rondout Land Corp	
Jones, Patricia	RW Garraghan Inc	

FIGURE 04.6 Table of Private owners in the BOA Boundary



FIGURE 04.7 Natural Resources

WETLANDS AND FLOODPLAIN

Figure 04.7 depicts water features in the subject area. The entire area proposed to extend the BOA boundary is located within areas designated as wetlands by the US Fish and Wildlife Service's (USFWS) National Wetland Inventory maps. There are no New York State Article 24 designated wetlands within the subject area.

In this area of the BOA, Rondout Creek is a protected stream under New York State (NYS) regulation (855.4-1). The Rondout Creek has a Standard and 701.8 Class C - fresh surface waters. Best usage is for fishing, suitable for fish propagation and survival. Suitable for primary and secondary contact recreation although other factors may limit the use for these purposes. The majority of the subject area is located within the Federal Emergency Management Agency (FEMA) mapped 100 year flood plain.

As part of the Hudson River Estuary, the BOA is located within an area designated by the New York State Heritage Program (NYSDEC & SUNY College of Environmental Science and Forestry) as having Significant Natural Communities, which require an assessment of environmental impacts. The purpose of the program is to facilitate conservation of rare plants and animals and natural ecosystems.



FIGURE 04.8 Cultural Resources

CULTURAL RESOURCES

As depicted on Figure 04.8 Cultural Resources, the proposed extended BOA boundary is located adjacent to the Rondout-West Strand Historic District, a National Register-listed historic resource (90NR01103). The district is roughly bounded by Broadway, Rondout Creek, Ravine, Hone and McEntee Streets. According to the NYS Office of Parks, Recreation and Historic Preservation (0PRHP) – State Historic Preservation Office (SHPO), the entire BOA Plan area is located within an area designated as sensitive for archeological sites and therefore, future redevelopment projects may require cultural resources investigations prior to construction.

ADDITIONAL STRATEGIC DEVELOPMENT SITES

Of the five sub areas included in the proposed extended BOA boundary, the following have been identified as Strategic Sites.

- Noah Hotel Site
- Block Park & Island Dock (former Block Plant)

This section forms an important update to the August 19, 2010 Waterfront Brownfield Opportunity Area - Step 2 Nomination Report. At that time, the 2010 Census data and the 2012 American Community Survey (2012 ACS) data was not available. The Project Team has reviewed data from these sources, along with reports from the Ulster County Chamber of Commerce and field interviews to drive the analysis of the economic dynamics in the Study Area.

PHYSICAL CONTEXT

The BOA offers incredible natural, recreational, and economic resources that are a key to the economic prosperity of the City of Kingston. The presence of Regional assets attracts tourists, visitors and new residents to live in and around the historic Rondout district and encourage them to take advantage of the City's recreational resources at Kingston Point Park and Kingston Point Beach. Protecting these finite resources has been a central priority for the City leadership, residents, and nonprofit organizations and property owners. The strategic location and the developable portion of the Rondout and Hudson River Waterfronts and portions of the nearby Rondout and Ponckhockie neighborhoods are a vital asset to the area. These areas have long been affected by the environmental conditions and heavy industrial uses of the past. Property values in these neighborhoods are not as high as the surrounding City.

REGIONAL SETTING

New York State as we know it, attributes much of it's boundaries through strategic connections and alignment with important resources. The Hudson River and the Mohawk River are two key connections. Historically these links have proved to be critical transportation and migration paths to the west as a passage through the Appalachian Mountains, between the Catskill Mountains and Allegheny Plateau to the south and the Adirondack Mountains to the north. Historically linking New York


City with the Great Lakes, the Northeast Region and to the Western United States. Kingston was part of this extensive network.

UNDERSTANDING THE NEW YORK ECOLOGIES

Understanding the larger ecological systems are key to revitalizing the Kingston Waterfront. They illuminate key synergies and look beyond political boundaries that may be arbitrary.

Figure 04.9 depicts how the boundaries of watersheds extend beyond political jurisdiction. The watersheds of New York state cross the boundaries of four different states as well as international borders. The Rondout is a critical link to intersecting sheds. Straddling the Walkill and Rondout watersheds, the Rondout Creek is one of the Hudson River's largest tributaries. The water that flows past the Kingston waterfront was collected across an area totaling nearly 1,200 square miles, including five counties and two states.

Source: NYSGIS, USGS

Figure 04.10 illustrates the New York State Ecozones and highlights Kingston, New York and Ulster County within the state ecozone fabric. The City of Kingston is spread between the Catskill Peaks, Neversink Highlands, Shawankgulk Hill, and the Central Hudson ecozones. The BOA study site lies within the Central Hudson ecozone.

Source: NYSDEC, NYSGIS



HUDSON RIVER VALLEY

Henry Hudson explored the area of present-day New York in 1609 and claimed it for the Netherlands. His journey stimulated Dutch interest, and the area became known as New Netherland. In 1625, the city of New Amsterdam (the location of present-day New York City) was designated the capital of the province.

The Mid-Hudson Valley and Ulster County began as farming communities and prospered during the industrial revolution later to emerge as a regional economic powerhouse in New York State. The City of Kingston is located on the western bank of the Hudson River approximately 54 miles south of Albany, and 104 miles north of New York City. It is roughly bounded by the New York State Thruway to the west, the Town of Ulster to the north, the Town of Esopus to the south, and the Hudson River to the east. Kingston is located in the northeastern portion of Ulster County directly across the Hudson River from the Town of Rhinebeck. As mentioned earlier, Kingston is the county seat of Ulster County and is a major regional commercial and business center. The City has significant frontage on the Hudson River and a lengthy and protected shore on Rondout Creek, a major tributary of the Hudson. Rondout Creek in particular offers space for marina activity for small craft and river tour vessels. The river and creek once had a considerable amount of barge traffic. Kingston is on the edge of the Catskill Mountains, which are home to the Catskill Park and the well-known Catskill resort area. Interstate Highway 87, the New York State Thruway, crosses the western edge of Kingston and is connected to the City center by Interstate 587. US Highway 9W provides additional north-south highway access, paralleling the Hudson River, US Highway 209 intersects the Interstate to the west of the City. State Highways 28 (east-west) and 32 (north-south) provide access to other communities in the county.

Figure 04.12 shows how Kingston is made up of two distinct watersheds: Rondout and Middle Hudson. This map illustrates the City of Kingston's watershed reach at a regional scale. Water that emerges at the mouth of Rondout creek begins at the northern portion of New Jersey.

Source: NYSGIS, USGS



KINGSTON AND THE WATERFRONT

UPTOWN, MIDTOWN, DOWNTOWN

Kingston's Uptown neighborhood is where visitors will find many fine examples of America's early colonial history. The first permanent settlement was built in 1652. Governor Stuyvesant ordered the original stockade built in 1658 to protect the early settlers from local Indian attacks. Originally called Wiltwyck, Uptown Kingston is the largest remaining example of early Dutch settlement in New York State. In 1777, Uptown Kingston's Senate House is where the first capital of New York was established, and visitors can explore many historic sites and museums that represent that era.

Midtown Kingston reflects a history of industry and expansion. Following the opening of the railroad in the mid-nineteenth century, which ran between (Uptown) Kingston and Rondout, there was a natural growth towards the new transportation line. When the two villages merged, City Hall and other municipal features were built in this newest part of the city. Visitors will find an eclectic mix of shops, music venues, restaurants, specialized manufacturing (many related to the arts), micro breweries, city government offices, Kingston Hospital, and many fine examples of Victorian and early twentieth century architecture.

The Rondout neighborhood is located on the shore of Rondout Creek near where it meets the Hudson River. Initially a key port for the shipment of timber and agriculture to the colonies and beyond, the area boomed with the opening of the Delaware and Hudson Canal in 1828; it became a trade hub for coal from Northeast Pennsylvania, bluestone from the Catskill Mountains, cement from Rosendale, and bricks made from local clay. The area grew so rapidly that it incorporated as the Village of Rondout in 1849, and by 1872 it merged with the then-Village of Kingston to form today's city. By the time the canal closed in 1899, the port area featured buildings in all the nineteenth century architectural styles.

Activating the Rondout and creating upland connections is key to the revitalization of the waterfront. The waterfront will be an exciting place for locals and a regional draw for visitors.

HISTORICAL CONTEXT

T 1614

The Town of Esopus begins as a trading post between the Dutch and the Esopus Indians. The town grows but sees many violent conflicts with the Indians in the following decades.



1683

The colony of New York is divided by the British into counties and Kingston becomes part of Ulster County.



1777

Kingston is New York's first capital before it is burned by the British and the capital is moved to Albany.

1828

Port of Rondout grows to rival the stockade area with the construction of the Delaware and Hudson Canal.

1962

Urban Renewal is included in city's comprehensive development plan.



1950s

As the State's highway system expands, trucks and cars gradually overtake the railroads as the major transporter of goods.

Late 1800s

Railroads replace the canal and river as the dominant form of commercial transportation.

1872

The City of Kingston is created including the Village of Rondout, the Village of Kingston, and the Hamlet of Wilbur.





1970s

Much of Kingston's waterfront is in deteriorated condition, the Kingston Point Lighthouse is abandoned, Kingston Point is a landfill, commuter railroad tracks are rusting and overgrown with weeds, Rondout is a series of vacant and deteriorating structures.

1992

The city's Local Waterfront Revitalization Program (LWRP) is adopted.

1995

After operating its main plant in Kingston for 40 years, IBM closes its doors, leaving thousands of residents unemployed.



2005-2007

Historic Kingston stitches together the waterfront

CLIMATE

On average, there are 177 sunny days per year in Ulster County, NY. The July high is around 79 degrees and the January low is 15. Given the extreme temperature variances across the calendar year there is a need to design an adaptable all season waterfront. An actively programmed waterfront that allows a flexible range of uses and celebrates each season, including the colder months. There should be areas of refuge from the cold and extreme heat and they should provide active recreation during all months. Building ground floors can be used as public amenities and opportunities to get out of the weather. Pleasant months offer opportunities to provide open air atmosphere that leverage the breezes and sound of the Rondout.

WIND

The average wind speed is comparable to the national averages and are slightly higher in the winter. Typically the wind blows into the Rondout from the Hudson and can be quite strong at times. Careful considerations should be made to orientate buildings and landscape to protect from the wind and provide areas of refuge. The wind can be an asset for recreational boaters choosing to sail but also tend to change quickly.

SOLAR

Given the breadth of the Rondout Creek and low scale buildings much of the waterfront is exposed to direct southern exposure. This is an asset in the winter when maximum sun exposure is desirable. In the stronger summer months shade structures and landscaping will be needed to provide respite from the heat.

PRECIPITATION

Ulster County, NY, gets 46 inches of rain per year compared to the US average of 37. Ulster County also gets 45 inches of snowfall compared to the US average of 25 inches of snow per year. The number of days with any measurable precipitation is 120. Given the high level of precipitation, strategies should be implemented to capture rain water and increase permeable surfaces to reduce strains on infrastructure and the potential of contaminates washing into the creek.



FIGURE 04.15 Winter in Kingston















FIGURE 04.16 Annual climate trends



FIGURE 04.17 Temperature trends (1900-2013)



FIGURE 04.18 Precipitation trends (1900-2013)



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	SPATIAL SCALE OF Projection	DIRECTION OF Change by 2050s	LIKELIHOOD	SOURCES
TROPICAL CYCLONES				
Total number	North Atlantic Basin	Unknown		
Number of intense hurricanes	North Atlantic Basin	Increase	More likely than not	USGCRP, 2013; IPCC, 2012
Extreme hurricane winds	North Atlantic Basin	Increase	More likely than not	USGCRP, 2013; IPCC, 2012
Intense hurricane precipitation	North Atlantic Basin	Increase	More likely than not	USGCRP, 2013; IPCC, 2012
NOR'EASTERS	NYC area	Unknown		IPCC 2012; Colle et al. 2013

FIGURE 04.20 Projected direction of climate event change by the end of the century

OBSERVED CLIMATE TRENDS (1900 – 2013)

The following climate trend observations were made in the New York City Region and are described in Cynthia Rosenzweig's Center for Architecture AIA *Responding to Climate Change in New York City* (NPCC 2015 Report).

TEMPERATURE

Mean annual temperature has increased at a rate of 0.3°F per decade (total of 3.4°F).

PRECIPITATION

Mean annual precipitation has increased ~0.8 inches per decade (total of 8 inches).

Year-to-year (and multi-year) variability of precipitation has become more pronounced, especially since the 1970s.

SEA LEVEL

Sea level rise in New York City has averaged 1.2 inches per decade (total of 1.1 feet), nearly twice the observed global rate over a similar time period.

CHANGES IN EXTREME EVENTS

As noted above the probability of occurrence and likelihood of intense hurricanes and other extreme weather events will more likely than not increase by 2050. This has a tremendous effect on what and how we build at exposed development sites like those along the Rondout.

RECOMMENDATIONS DUE TO CLIMATE CHANGES

Given the concerns for increasing temperature and more frequent storm events there is a tremendous need to address these issues through the redevelopment plan for the Rondout. There is potential to reduce the amount impervious surfaces, and focus on vulnerable populations who may not be able to afford air conditioning. Other at risk population, such as the elderly will need alternative means of transportation and plenty of shade at the waterfront.



REGIONAL HYDROLOGY + FLOOD RISK

The Kingston BOA site area is susceptible to flooding from two different watersheds—Middle Hudson Watershed and Rondout Watershed. It is also vulnerable to storm surge from the lower Hudson, as during Hurricane Sandy. As illustrated in Figure 04.21, the bright yellow zones highlight the 100-year floodplain. The majority of the BOA site lies within this area. It is important to consider BOA recommendations that take into consideration the impacts of residing in the 100-year floodplain. However (see sea level rise), the 100 year floodplain will be shifting upland over the next century, expanding the areas now vulnerable to flood and inundation.

Sources: FEMA, USGS, Scenic Hudson

The following map series (Figure 04.24 - Figure 04.27) illustrate the increased movement and projected 100 year floodplain over time. Many significant waterfront sites within the BOA—including the sewage treatment plant—will be inundated or made more vulnerable to flooding. So the question is how do we make recommendations that consider the vulnerable Kingston waterfront edge through our BOA research and recommendations? The areas of highest risk of contamination are also at greatest risk of inundation. How can we use the process of remediation and clean-up to create vibrant public spaces, linking Kingston to the Hudson, while acknowledging how the shoreline will change in the coming decades?

Sources: Scenic Hudson, USGS



FIGURE 04.22 Flooding at the Kingston Waterfront



Kingston's location on the Hudson River makes it vulnerable to sea level rise. As sea levels around the world rise due to global warming, Kington's 100 year floodplain will be shifting upland over the next century, expanding the areas vulnerable to flood and inundation. Using datasets created by Scenic Hudson, these diagrams depict the areas that could be impacted by rising waters under two of the most common sea level rise scenarios outlined by the NYS Sea Level Rise Task Force Report (2010) and NYS 2100 Commission Report (2013)). The Central Range scenario (Figure 04.24



FIGURE 04.24 2050 Central Range Scenario: 100-yr Flood + Inundation

and Figure 04.25) depicts the central range of model-based probabilities, while the Rapid Ice Melt scenario (Figure 04.26 and Figure 04.27) is based on a more accelerated rate of ice melt as currently seen in Greenland and the West Antarctic. As the future of sea level rise is dependent on so many interdependent and unpredictable integers, any development in the Rondout must be flexible to a range of outcomes in the coming century. In both scenarios, substantial portions of the BOA are impacted by increased flooding and inundation.



FIGURE 04.25 2100 Central Range Scenario: 100-yr Flood + Inundation



FIGURE 04.26 2050 Rapid Ice Melt Scenario: 100-yr Flood + Inundation



FIGURE 04.27 2100 Rapid Ice Melt Scenario: 100-yr Flood + Inundation

EDGE CONDITIONS

Based on an US Army Corps study and our own site observations, we have categorized the entire BOA site area edge condition into a series typologies. Each typology is graded based on good to fair to poor condition. The accompanying site photos provide an additional layer of illustrative information of the different edge types and material palette.





EDGE CONDITION ANALYSIS

In an inspection conducted in 2011 for the Planning Assistance to States (PAS) study, the creek was found to be segmented with large areas of underutilized, abandoned, and deteriorating shoreline. As the LWRP supports mixed use, waterbased land uses along the Rondout Creek, it envisions improving the appearance and stability of the shoreline via a joint effort by the City of Kingston and the private sector. Part of this vision has already been realized, with the northern shoreline of Rondout Creek having already been extensively developed for marinas, dry docks, and residential and commercial uses.

As Figure 04.29 and Figure 04.29 indicate, the shoreline is in a variety of conditions along the Rondout Creek waterfront and the Hudson River waterfront.

Source: Rondout Harbor Management Plan, 2014



MIXED STABILIZATION - FAIR CONDITION MIXED STABILIZATION - POOR CONDITION



RIPRAP - GOOD CONDITION RIPRAP- FAIR TO POOR CONDITION

FIGURE 04.29 Kingston Waterfront Edge Conditions Photos





NATURAL SHORELINE CONSTRUCTED BEACH

TIMBER BULKHEAD- GOOD CONDITION TIMBER BULKHEAD- FAIR TO POOR CONDITION



STEEL OR CONCRETE BULKHEAD- GOOD CONDITION Steel or concrete bulkhead- fair to poor condition



ABANDONED DRY DOCK CONCRETE CULVERT GOOD CONDITION



FIGURE 04.30 West Strand Street

LAND USE, ZONING AND URBAN FORM

LAND USE AND ZONING

The zoning designation for the main BOA is RF-R (Rondout Creek District). The purpose of the Riverfront District RF-R Rondout Creek zoning is to "afford priority to water dependent uses, achieve public access to the BOA, control development, create distinct Hudson River and Rondout Creek waterfront districts and to implement the policies and purposes of the City of Kingston Local Waterfront Revitalization Program. Further, it is the purpose of the districts to provide opportunities for permanent public views and access to the Hudson River and Rondout Creek and to encourage the phase out of certain uses which are incompatible with and detract from the Hudson River and Rondout Creek waterfront areas." Most of the remaining land in the BOA is zoned RFH (Hudson Riverfront District). A one-family residential district (RRR) covers the Ponckhockie Neighborhood. Parts of the East Strand and Abeel Street area are zoned as General Manufacturing (M-2) and General Commercial (C-2). The following table (Table One - Page 51) summarizes the uses allowed as of right in each district. Related codes affecting the BOA and adjacent lands include the control of "Waterfront Facilities." These codes identify the uses and policies related to marine facilities in the general harbor area under the administration of the City Harbor Manager. The area is also subject to "Waterfront Consistency Regulations." The purpose of that article is to



"provide a framework for agencies of the City of Kingston to consider the policies and purposes contained in the Local Waterfront Revitalization Program when reviewing applications for actions or direct agency actions located in the BOA and to assure that such actions and direct actions are consistent with said policies and purposes,"

TAX STRUCTURE

The Waterfront BOA "underperforms" from a tax base perspective. While the area represents more than three percent of the City's assessed land area, it accounts for less than one-half of one percent of the tax base, in large part because its substantial redevelopment potential has not yet been implemented.

The various opportunities to encourage and incentivize economic development are currently being explored in the comprehensive planning exercise and will be further assessed later in this process.

- Parks and Open Space
- Industrial
- Vacant
- Unknown



FIGURE 04.32 Historic Kingston Waterfront

DESIGN GUIDELINES

In 2006 the City prepared and adopted a set of design guidelines to shape future development and rehabilitation of buildings on the waterfront within the BOA. These guidelines help the City to direct the density, appearance and massing of waterfront development so that it accomplishes the goal of an active vibrant waterfront. Key elements include:

- a. Environmental Context
- b. Building Height and Scale.
- c. Building Material
- d. Site Planning

These guidelines are being reevaluated in the new comprehensive planning process.

WATERFRONT ZONING REGULATIONS

Chapter 398 of the Kingston Charter that regulates waterfront development including the development found abutting the Rondout. These particular regulations and standards dictate access, setbacks, protect the environment and spur economic development.

These guidelines are being reevaluated in the new comprehensive planning process.

OPEN SPACE

Kingston Point Park is a critical amenity for the Hudson and Rondout waterfronts. It was the historic landing for the Day Liner boats from New York City. Passengers disembarked and could visit the amusement park then on site, take a trolley into Kingston, or stroll along the waterfront. The Day Line Dock held two sets of Rail Road tracks for the Ulster and Delaware Rail Road and passengers would disembark, and could also go elsewhere in the City of Kingston or the northern Catskill Mountains. Today, parts of the site have been restored with landscaping, picnic pavilions, and a bridge connecting the park's mainland to the peninsula that connects the park to the Rondout waterfront and the trolley tracks (the location of the former Day line boat dock). Kingston Point Park is well utilized for events and by neighborhood residents. With additional investment, it would become a major attraction for waterfront visitors. Kingston Beach is adjacent to Kingston Point Park and is heavily used as



FIGURE 04.33 Kingston Open Space and Vacant Land



FIGURE 04.34 Kingston Waterfront

a summer recreation site. Block Park is also included within the BOA and is largely unprogrammed for recreation at this time.

URBAN FORM

The City's population continues to decrease and income growth has been slower than projected and did not keep pace with inflation between 1990 and 2000. This was likely influenced by the closure of the IBM campus nearby, but it represents decreased spending power by Kingston residents, as will the declining rate of consumer confidence throughout the current year. Incomes among Rondout area residents were slightly lower in 2000 than the City as a whole, but are increasing faster than other city neighborhoods. Recent data indicates that this trend is continuing. The Rondout waterfront experienced significant growth in population and housing units between 1990 and 2000, though the pace has slowed significantly in the past three years. Constriction in the housing market in general and a rising rate of home foreclosure is a concern for the adjacent low and moderate income neighborhood. In migration of some second homeowners indicates an increased need for goods and service providers. Though the pace of growth has slowed, a strong "buy local" mentality exists in the neighborhood. Kingston has experienced the same impacts as the surrounding Mid-Hudson Valley including skyrocketing housing costs, continual immigration from the greater NYC metro area, and more recently, a slowing climate for economic development as investors react to national economic trends. Though the current economic recession and world-wide financial

crisis will continue to impact the City, the economic analysis of recent years found that the City of Kingston is a regional commercial and business center with strengths in services and health care, retail and finance, insurance and Real Estate (FIRE) sectors.

Kingston's strong "new economy" orientation means that it is ahead of national percentages of total employment in service occupations. Its strongest growth sectors are in transport, communication, services and FIRE. The Kingston area has a substantial amount of office and industrial space available and some retail space. New development along the waterfront should differentiate itself from the City's current inventory of space so that it will attract and accommodate new business and residents without contributing to higher city-wide vacancy levels.

The City's location at the juncture of the Hudson River and Rondout Creek, along with significant historic resources, and good access to I-87 and thence to the New York metropolitan area create some currently unexploited tourism opportunities. The Hudson River is currently an under-used waterway with regard to tourism potential. The strong "influence" of the New York metropolitan area which offers unique opportunities for tourism and visitor activity, cultural and destination retail, and economic development for high value added activities (both service and production) where proximity to final customers does not require companies to be located in that metro region. The obvious downside of dependence on the NY metro market at the current time is that it may take many years for key industries (and their employees) to recover from the recent recession. This population feeds the City of Kingston's tourist and visitor base but has also been a source of disposable income from second home owners and artists relocating to the City. The region has significant "facilities assets" that are available for development (some with and some without the need for significant renovations). These could be utilized without adversely affecting Ulster County's open land assets. Redevelopment of existing facilities, buildings, and industrial land including brownfield sites can be made more competitive during this period if state and federal agencies do not disrupt the flow of funds for infrastructure improvement, economic development incentives and access to specialized lending pools and subsidized loan products. The region was still undergoing economic change following adjustments by major employers (including the reduction and re-establishment—albeit in a neighboring county—of IBM as one of Ulster County's largest employers). The new economic downturn will frustrate efforts to recover from earlier business losses. The region has also experienced an increasing number of inmigrants who work outside of Ulster County due to housing market developments in the greater Hudson Valley region. Economic development policies could be explored to take advantage of these new in-migrants that may represent an opportunity to cultivate quality jobs for those new residents that could also encourage a new level of level of entrepreneurship in the region.

HABITAT

REGIONAL SPECIES HABITAT

This map illustrates the critical habitat zones within Kingston's harbor on the Hudson River. Kingston is part of the majestic North American Flyway for migrating birds. The Hudson River creates a significant habitat zone for birds and fish to flourish. Kingston harbor and Rondout Creek provide critical habitat for migratory fish species that move from the Atlantic to freshwater havens for spawning. The American Shad uses the Hudson and Roundout Creek for spawning. The Osprey uses the Kingston waterways for feeding for spring and fall bird migration.

Source: NYSDEC, NYSGIS, USACE Kingston Harbor Waterfront Management Plan



FIGURE 04.35 Kingston Regional Species Habitat

KINGSTON CRITICAL HABITAT

This map illustrates the critical habitat zones associated with the Kingston waterways. There are significant tidal wetlands, coastal habitat zones, and biodiversity areas all around our BOA study site. These areas create important zones for ecological biodiversity.

Source: NYSDEC, NYSGIS, USACE Kingston Harbor Waterfront Management Plan



FIGURE 04.36 Kingston Critical Habitat

ECONOMIC CONTEXT

The viability and feasibility of the proposed rehabilitations and redevelopments on the subject sites will ultimately depend upon market dynamics. To this end, an important task for this Brownfield Opportunity Assessment is evaluating the project site within its local, regional, and national economic, demographic and real estate market contexts to assess the site's development potential. For this analysis, the team has utilized a variety of sources, including published economic, demographic and real estate data complemented with primary research/interviews with business owners and real estate professionals in Kingston and the surrounding Lower Hudson Valley. Through this process, the Project Team offers market-driven recommendations for the subject site rooted in an understanding of the local context.

In this section, we will describe:

- 1 Demographic trends
- 2 Economic trends
- 3 Real Estate trends

This section forms an important update to the "August 19, 2010 Waterfront Brownfield Opportunity Area - Step 2 Nomination Report." At that time, key government statistical reports, including the 2010 Census data and the 2012 American Community Survey data were not available. The data has been reviewed from these sources, along with reports from the Ulster County Chamber of Commerce and field interviews to drive the analysis of the economic dynamics in the City of Kingston.

DEFINING THE STUDY AREA

While Figure 04.3 displays the study area for the BOA – Step 3 project, we must examine a wider geographic area to assess the economic context and opportunities for the Kingston Waterfront Revitalization project. For the purpose of this analysis, we have identified three "Economic Study Areas," including, from macro-to-micro, Ulster County, the City of Kingston, and the 2010 Census Tract 9517, depicted in Figure 04.37.



FIGURE 04.37 Economic Study Areas from left to right: Ulster County, City of Kingston, 2010 Census Tract 9517

DEMOGRAPHIC TRENDS

POPULATION GROWTH

Ulster County's population grew from 2000 to 2010. As per the 2010 Census, there were 182,493 people residing in Ulster County – up from 177,749 people, as noted in the 2000 Census. This data demonstrates an approximately 0.26% compound annual growth rate for the population. The majority of the population growth was concentrated in the northern and southern municipalities of the County. Saugerties, to the north, and New Paltz, Lloyd and Shawangunk, to the south, experienced the highest growth rates in the County – significantly higher than the City of Kingston. In fact, although the City of Kingston made up approximately 13% of the County population in 2010, the City only accounted for 9% of the total growth over the 2000 to 2010 period. The growth in the southern municipalities of Ulster County is attributed to the growth of the State University of New York (SUNY) - New Paltz and the proximity of those areas to the Metro-North connection in Poughkeepsie.

The City of Kingston's population remained relatively stagnant from 2000 to 2010. As per the 2010 Census, there were 23,893 people, 10,217 households, and 5,441 families residing in the City of Kingston – slightly up from 23,456 people, 9,871 households, and 5,497 families, as noted in the 2000 Census. This data demonstrates a 0.2% compound annual growth rate for the population. The natural growth rate in the City of Kingston has been supported by in-migration. Anecdotally, the City of Kingston has witnessed growth due to the rising cost of living in the New York City metro area, as young professionals, particularly artists, have moved to Kingston from places, such as Brooklyn, seeking cheaper artist lofts/studios.

As compared to the County and the City, the population of Census Tract 9517 decreased from 2000 to 2010. As per the 2010 Census, there were 4,782 people residing in Census Tract 9517 – down from 4,841 people, as noted in the 2000 Census. The loss of the 59 people translates to a -0.12% compound annual growth rate for the population.

Another recent survey, the 2012 ACS, paints a more positive picture for Census Tract 9517. Paradoxically, while the populations of the County and the City remained stagnant or declined from 2010 to 2012, the population of Census Tract 9517 increased 0.48% per annum over the same period. Per anecdotal evidence from interviews with the community, the increase is due, in part, to the number of young professionals who have relocated from New York City into the Hudson Valley.

In summary, Figure 04.39 provides the total population of each Economic Study Area.

TOTAL POPULATION	CENSUS 2000	CENSUS 2010	ACS 2012
Ulster County	177,749	182,493	182,516
City of Kingston	23,456	23,893	23,864
Census Tract 9517	4,841	4,782	4,828

FIGURE 04.39 Total Population of Economic Study Areas





DEMOGRAPHICS TRENDS

One of the greatest population trends negatively impacting the City of Kingston is the aging population. Figure 04.40 compares the age distribution of the three Economic Study Areas as per the 2012 ACS.

In addition to the distribution by age, Figure 04.41 provides the demographic breakdown of the three "Economic Study Areas" per the 2012 ACS.



FIGURE 04.40 Age Distribution of Economic Study Areas





KEY TAKEAWAYS:

- 35.3% of the City of Kingston's population is over the age of 50, with 43% of that group over the age of 65, the traditional age of retirement.
- 30.1% of the population of Census Tract 9517 is under the age of 20 as compared to 25.7% for the City of Kingston and 23.3% for Ulster County, which indicates that the quality of primary schools may be of great importance to the community.
- The median age in the City of Kingston was 39.2 years as compared to 35.0 in Census Tract 9517, which is important as the population around this age is typically establishing families.
- Although the three levels of the "Economic Study areas" are overwhelmingly white, the Census Tract is slightly more racially diverse than the other two parts of the "Economic Study Areas." The increasing diversity of the Census Tract population may impact the spending habits, tastes and preferences of the study area, which may, in turn, lead to a medium-to-long term shift in the area's retail offering.

ECONOMIC TRENDS

One of the key indicators or measures of an economy's health is the total dollar value of all goods and services produced within a specific time period. For the United States of America, this calculation is called the Gross Domestic Product – but the size of any economy, whether down to the State or County level, is calculated and published by the U.S. Department of Commerce's Bureau of Economic Analysis. Regional planning authorities also project the economic growth of respective districts. For example, in "A Three-County Regional Housing Needs Assessment: Ulster, Orange and Dutchess Counties From 2006 to 2020" prepared by the Planning Departments of Ulster, Orange and Dutchess Counties of New York:

"The Gross Regional Product (GRP) of Ulster County is expected to grow at a yearly compounded rate of 1.2% from \$5.1 billion in 2006 to \$5.4 billion in 2010. Growth in GRP out to 2020 will be at about 1.8% per year and GRP will reach \$6.4 billion. Total non-farm employment in Ulster County will increase from 64,810 in 2006 to 67,390 in 2010, an increase of 0.9% per year. Continuing the forecast out to 2020, total non-farm employment will continue to grow at an annual rate of 0.8% per year to 73,070 jobs."

As an update to the projections of the aforementioned planning departments, the project team has analyzed data from the Bureau of Economic Analysis's 2015 update for the Gross Regional Product (in billions of real dollars, indexed to 2009) for the Kingston Metropolitan Statistical Area, which encompasses all of Ulster County:

	2006	2007	2008	2009	2010	2011	2012	2013
Kingston MSA - GRP (billions of real dollars)	5.069	5.016	4.970	4.937	5.012	4.884	4.858	4.888

Please note our analysis of the Bureau of Economic Analysis examines the real values as indexed to 2009, which are adjusted for inflation. Nominal or current values are not; therefore, nominal GDP will often appear higher than real GDP. Following the Great Recession, the growth of the Kingston MSA economy has not kept pace with the nation or with New York State. Further, as of 2013, the Kingston MSA GRP had not yet reached pre-recession levels. Figure 04.43 compares the year-on-year change in the Gross Domestic Product of the USA to the Gross State Product of New York State to the Gross Regional Product of the Kingston MSA for the 10-year period from 2004 to 2013:

Employment is another important indicator of the health of the economy. Figure 04.42 provides the 2014 employment by industry in Ulster County as published by the New York State Department of Labor.





FIGURE 04.42 2014 Employment by Industry in Ulster County.



FIGURE 04.44 A local market in Kingston's TR Gallo Waterfront Park

The economy in Ulster County is predominantly focused on the healthcare sector. The key healthcare employers include UnitedHealth Care, HealthAlliance of the Hudson Valley and Ulster-Greene ARC. Per the Ulster County Chamber of Commerce, other important private sector employers include: Ulster Savings Bank, Ametek Rotron, Alcoa Fastening Systems, Zumtobel-Staff Lighting, and Ceres Technologies, Inc.

Another often overlooked fact is that Ulster County has one of the largest concentrations of higher education institutions in the Lower Hudson Valley. With over 12,000 students and faculty, Ulster County's colleges and universities include The State University of New York (SUNY) at New Paltz and SUNY - Ulster in Kingston and Stone Ridge. As the StartUp New York program, which provides tax incentives for businesses that locate near eligible colleges or universities, grows and becomes better understood, positive community and economic benefits are anticipated to increase enrollment.

In addition to institutions of higher education, another significant employment driver is the Kingston City Schools. There are one high school, two middle schools and seven elementary schools in the district.

The economy of the Economic Study Area continues to struggle with the impacts of structural and cyclical unemployment. Figure 04.45 compares the annual unemployment rate for Ulster County and New York State for the 25-year period from 1990 to 2014 as sourced from the New York State Department of Labor.



FIGURE 04.45 Annual Unemployment Rate for Ulster County and New York State

In terms of structural unemployment, approximately 20 years after IBM's closure of its operations on a 256-acre campus in northern Ulster County, which served as the major employer for many years, the Economic Study Area continues to adjust to the new technology driven economy.

In terms of cyclical unemployment, the Economic Study Area is slowly recovering from the Great Recession. Entrepreneurs along with the musician/artist community have helped to revitalize the entire study area. There has been an increasing focus on the food industry, given the proximity to the Culinary Institute of America (CIA) and Hudson Valley farms who provide fresh fruits, vegetables, dairy products and meat. In addition to various retail operations (restaurants, butchers, wine shops), the area has been successful at attracting food-based industrial operations. Specifically, a company called Farm to Table Co-packers is a "full service contract packaging facility that produces everything from frozen vegetables and soups to jarred pickles and sauces." The company occupies over 28,000 SF within TechCity, at the former IBM campus.

In order to reverse the negative impacts on consumer spending and consumer confidence as driven by these structural and cyclical economic conditions, various State and Municipal agencies will need to continue working to re-train workers, educate the next generation, and craft incentive packages to draw new companies to the region. Given the diverse 100G fiber optic network that runs along the I-87 corridor between New York City and Albany, it is also important for the Economic Study Area to capitalize on its proximity to this resource to drive the growth of the technology sector.

KEY TAKEAWAYS:

- Only 14% of the City of Kingston's households have an income above \$100,000 as compared to 25% for the County of Ulster
- The median income for a household in the City of Kingston was \$44,646, while the median income for a household in the County of Ulster was \$58,934

REAL ESTATE TRENDS

In order to understand the condition of the existing real estate market and the plans for future development to inform the planning process, the team studied the key real estate trends for the Residential, Retail, Office, and Hospitality markets. The following sections provide details on the key trends for each of the aforementioned asset classes in the catchment area, which we have defined as being any property with a 10 - 15 minute drive of the BOA Plan area. The catchment area is inclusive of the following municipalities within Ulster County, as shown in Figure 04.46:

- City of Kingston, which is comprised of three major sub-markets, the Uptown Stockade Area, the Midtown Area, and the Downtown Waterfront Area;
- Town of Kingston;
- Town of Ulster, and
- Esopus.


HOUSING TRENDS

SUPPLY ANALYSIS

The following table provides the total number of housing units and the total number of occupied housing units for each municipality within the catchment area for 2000 and 2010.

As noted in Figure 04.47, the average occupancy was 92.6% in 2000 and 91.1% in 2010. In general, market-wide occupancy over 88% tends to indicate a scenario whereby there is limited fluidity in the market.

Over this time period, the supply of housing units across various price points was constrained in the catchment area and led to rising home prices and an increased rental market. Many households chose to rent given the high cost of home ownership. Per the "2010 Census" Ulster County had 48,189 or 26.4% of the population living in rental housing. Although around a quarter of the households choose to rent, even renting is increasingly not affordable. According to the American Community Survey 2012 ACS, 53.6% of Ulster County renters pay more than 30% of their incomes toward housing costs and 28.3% pay more than half their income toward housing costs. The City of Kingston has the most rental units in the County (5,897 units or 21% of the total rental units in the County).

The Ulster County Planning Department conducts the Non-Subsidized Housing Survey every year. Each year, the Ulster County Planning Department sends the survey to approximately 130 owners/managers with around a 60% participation rate. Figure 04.48 provides the average monthly rents for non-subsidized housing in Ulster County in 2011 and 2014 and the Compound Annual Growth Rate (CAGR) over the same period.

UNIT TYPE	2011 SURVEY AVERAGE RENT (PER MONTH)	2014 SURVEY AVERAGE RENT (PER MONTH)	COMPOUND ANNUAL Growth Rate
Studio	\$564	\$677	6.28%
1-BR	\$796	\$887	3.67%
2-BR	\$959	\$1,023	2.18%
3-BR	\$1,147	\$1,153	0.17%

FIGURE 04.48 Average monthly rents for non-subsidized housing in Ulster County.

		2000		2010		
	Total Housing Units	Occupied Housing Units	Market-wide Occupancy	Total Housing Units	Occupied Housing Units	Market-wide Occupancy
City of Kingston	10,637	9,871	92.8%	11,147	10,217	91.7%
Town of Kingston	398	356	89.4%	432	380	88.0%
Town of Ulster	5,239	4,850	92.6%	5,368	4,961	92.4%
Esopus	3,724	3,439	92.3%	3,969	3,492	88.0%
Total	19,998	18,516	92.6%	20,916	19,050	91.1%

FIGURE 04.47 Housing Units Within the Catchment Area

In addition to the market-wide supply indicators, we also examined the subject project's existing and future competitive set, which, given the attributes of the study area and the key sites, we determined to be multi-family projects with water views. Figure 04.49 and Figure 04.50 provide the location of a competitive set of multi-family residential properties.



FIGURE 04.49 Multi-family Residential Properties Map

MAP #	NAME OF PROPERTY	LOCATION	DEVELOPER(S)	UNITS (#)	ТҮРЕ	STATUS / YEAR OF Completion
1	Hudson Valley Landing	City of Kingston	-	34	Apt	Completed, 1990
2	Hudson Landing	City of Kingston	AVR	1,682	Condo	Under Construction, 2017-2033
3	Sailor's Cove	City of Kingston	771 Polaris Ltd	383	Condo	Under Planning, TBD
4	Riverview on the Hudson	Port Ewen	-	80	Condo	Completed, 1988
5	Rondout Harbor	Port Ewen	-	78	Condo	Completed, 1986
6	The Hills	Port Ewen	-	42	Condo	Completed, 1987
7	Lakeshore Villas	Port Ewen	Morgan Management	152	Apt	Completed, 1970s
Total				2,451		

FIGURE 04.50 Multi-family residential properties chart

NO.	NAME OF PROPERTY	AMENITIES	VIEWS	UNIT TYPES		
				Bedrooms / Bathrooms	SF	Monthly Rent / Asking Price
1	Hudson Valley Landing	N/A	Rondout Creek	4 Bed / 2 Bath	1,800	TBD
2	Hudson Landing	78,500 SF of retail 350 acres of the 525 acre site is dedicated to open space, including hiking and bike trails and paths	Hudson	TBD	TBD	TBD
3	Sailor's Cove	Clubhouse, Swimming Pool, Tennis Courts	Hudson	TBD	TBD	TBD
				1 Bed / 1 Bath	1,307	TBD
4	Riverview on the Hudson	Clubhouse, Swimming Pool, Tennis Courts	Hudson	TBD	TBD	TBD
Hudson			TBD	TBD	TBD	
F	Dandaut Harbar	Clubbourg Swimming Deal	Dandaut Craak	1 Bed / 1.5 Bath	1,372 – 1,972	TBD
5	Rondoul Harbor	Clubhouse Swimming Pool	Rondout Creek	3 Bed / 2.5 Bath	TBD	\$1,250
6	The Hills	N/A	Rondout Creek	TBD	TBD	TBD
7 Lakes		eshore Villas Fitness Center, Clubhouse, Tennis & basketball courts and 2 Swimming Pools		1 Bed / 1 Bath	737 - 910	\$945 - \$1090
	Lakeshore Villas		Esopus Lake	2 Bed / 2 Bath	1,012 - 1,077	\$1,160 - \$1,325
				3 Bed / 2 Bath	1,160	\$1,375 - \$1,515

FIGURE 04.51 Multi-family Residential Properties Chart

SUPPLY AND DEMAND FORECASTS

Figure 04.52 provides the supply and demand forecasts for the catchment area.

Our analysis indicates the catchment area may be able to absorb an additional 750 - 900 units (30 - 40 additional units per annum) from 2015 through 2033.



FIGURE 04.52 Supply and Demand Forecasts for the Catchment Area

RECOMMENDATIONS FOR KINGSTON WATERFRONT

Based upon our market research and the "fair share pull" of the subject project given its attributes, Kingston Waterfront may be able to support 75 - 150 units by 2033.

Developing and successfully managing a multi-family residential project at Kingston Waterfront requires:

- Innovative economic incentive packages for the development community.
- Given the issues of affordability within the City of Kingston, from a market demand perspective, there is significant demand for multi-family development for full-time residency within the study area. It is likely to attract a wide range of end users – from young students to professionals/artisans/artists to retired senior citizens. A targeted approach to the spatial needs and recreational desires a diverse set of end users during the detailed design process will be important.
- Those seeking vacation/second homes is another sub-set of potential project demand. This segment, while difficult to calculate, can anecdotally be further bifurcated into those who seek single family homes for space or gardens or the ability to customize versus those who might prefer to live within a well-managed, waterfront community for the convenience and proximity to shopping, dining, and water activities. Thus, a strong focus on servicing requirements and a community management system is critical. Sustainable and successful residential communities typically have strong covenants regarding service charges.
- Speed to market and keeping a pulse on the movement of the absorption of residential product. According to market sentiment, and the current and anticipated absorption levels, the timing of rental units is most likely to be effective from now through mid-2019, after which demand may soften due to the increase in supply from the anticipated handover of units in Hudson Landing: Phase 1b and Sailor's Cove.
- Hudson Valley Comparable Developments: 1 East Main (Beacon, NY): 19 loft-style condominiums and 5,744 SF of ground floor retail.

Finally, based upon our analysis, the initial properties developed at Kingston Waterfront are likely to garner net rental rates of \$1,000 per month for a onebedroom up to \$1,750 per month for a three-bedroom, depending upon size and quality of construction. We recommend units slightly larger than the competitive set, but as noted, it will be important to rationalize the efficiency of the space during the detailed design process.

RETAIL TRENDS

This section provides an overview of the retail market in Kingston, which is comprised of two major sub-markets, the Uptown Stockade Area and the Downtown Waterfront Area.

SUPPLY COMMENTARY

Both sub-markets within the City of Kingston are characterized by ground floor, street front retail. The majority of the businesses are locally owned. Various business organizations, including Kingston Waterfront Business Association and Kingston Uptown Business Association, support the local retailers by programming events, such as farmers' markets, street music festivals, holiday activities, and art fairs.

The project team has surveyed the key retailers in both submarkets, and given that the majority of the retailers are Food and Beverage ("F&B"), the team further segmented the F&B market.

DOWNTOWN WATERFRONT RETAILER	USE
Armadillo Bar & Grill	F&B – Restaurant
Bella Mia's	F&B – Ice Cream Parlor
Dermot Mahoney's Irish Pub	F&B – Bar
Dolce	F&B – Ice Cream Parlor
Golden Ginza Sushi Bar	F&B – Restaurant
Grounded	F&B – Restaurant
Karmabee	Apparel –Infant & Children
Kingston Wine Co.	Specialty F&B – Wine Shop
Mariner's Harbor	F&B – Restaurant
Milne's At Home Antiques	Housewares
Mole Mole	F&B – Restaurant
Next Boutique	Apparel
Ole Savannah	F&B – Restaurant
Olivieri's Arts, Crafts, and Coffee	Homewares & F&B – Cafe
Pirate Upholstery	Homewares
Rachel's Deli	F&B – Quick Service
P&T Surplus	Hardware
Rondout Music Lounge & Bistro	F&B – Restaurant
Savonas	F&B – Restaurant
Ship to Shore	F&B – Restaurant
Skillypot Antiques Co.	Homewares
The New Leaf	Specialty F&B – Tea Shop
Trends Hair Design	Salon

UPTOWN STOCKADE RETAILER	USE
Boitson's	F&B – Bar
Colonial Health Food Center	Specialty F&B – Organic
Ecce Terra	F&B - Restaurant
Elephant	F&B – Wine Bar
Fleisher's Grass-Fed & Organic Meats	Specialty F&B – Butcher
Hoffman House Restaurant	F&B - Restaurant
Jane's Ice Cream	F&B – Ice Cream Parlor
Keegan Ales	F&B – Bar
Outdated	F&B - Cafe
Santa Fe	F&B - Restaurant
Sissy's Cafe	F&B - Cafe
Snapper McGee's	F&B – Bar
Stella's Restaurant & Artie's Bar	F&B - Restaurant
Yum Yum Noodle Bar	F&B - Restaurant

FIGURE 04.53 Selection of key Kingston retailers in primary submarkets

KEY TERMS

- Asking rents (NNN) range from \$12.50-17.50 per SF
- Retail units range from 500 to 1,000 SF for specialty uses / apparel shops and 1,500 to 7,500 SF for restaurants.

Nationally and internationally branded retailers, whether Big Box, Apparel, Homewares, or F&B companies (including supermarkets), are concentrated just north of the city in the Town of Ulster at the junction of Highway 9W and Highway 209/199. However, these malls are becoming obsolete as shoppers turn to online retailing and as the nationally and internationally branded retailers are closing stores in secondary and tertiary malls. For example, Hudson Valley Mall opened in1981, when the economic impact of IBM was reaching its height. Today, the 810,000 SF shopping center has over 40,000 SF sitting vacant. While the shopping center has tenants such as Sears, Macy's, Target, Best Buy, a food court and a 12-screen Regal Cinemas, overall market trends may require an asset repositioning.

DEMAND COMMENTARY

Demand for retail space is driven by two segments of the population:

- Residents
- Visitors

For the first segment, Residents, it is important to examine household income data to understand the affordability levels of the population and disposable income trends. Unfortunately, the City of Kingston lags behind other areas in Ulster County regarding household incomes – and over 50% of its Residents spend are 'housing cost burdened', meaning +30% of household income is spent on housing. This scenario results in lower spending power and disposable income. Per data from the "2012 ACS American Community Survey," Figure 04.54 displays the percentage of households within each household income bracket for the City of Kingston versus Ulster County.



FIGURE 04.54 *Percentage of Households within Each Household Income Bracket*

RECOMMENDATIONS FOR KINGSTON WATERFRONT

Based upon the feedback from current retailers along the Kingston Waterfront, community stakeholder feedback, and the quantitative analysis of consumer spending power and patterns in the catchment area, the project team recommends:

 An 8,000 – 10,000 SF retail market development, similar to the San Francisco Ferry Building, Chelsea Market or Gotham Market, characterized by architecture that reflects the mid-Hudson vernacular and ensures relatively standardized retail unit sizes with the ability and flexibility to easily expand units. This concept would cater to entrepreneurs seeking smaller units, who would be able to grow their business and expand their footprint over time. The merchandizing mix envisions a significant portion of the units

KEY TAKEAWAYS:

Within the framework of a challenging, albeit slowly growing economy household incomes in the City of Kingston are not anticipated to significantly increase. As this segment is the larger of the two demand segments for retail in the City of Kingston, it is imperative that the retail offer matches the affordability of the population.

In terms of demand from retailers for "brick-and-mortar" space and feedback from the community regarding the proposed merchandising mix, it might be difficult to attract additional restaurant concepts to the Rondout given that over half of the existing shops are F&B. However, there are multiple successful "Specialty F&B" concepts (i.e. meaning the companies sell prepared foods, not meals) in Kingston:

- Anarchy in a Jar, which makes over 15 types of small-batch preserves;
- Blackcreek Mercantile & Trading Co., which sells locally made cooking tools, dishes, and kitchen furniture;
- Fleisher's, which butchers and sells humanely, pasture raised meats with two New York locations (Brooklyn and Kingston);
- Kingston Wine Co., which sells and promotes wines from responsibly farmed vineyards and hosts tastings and dinners;
- Treeline Cheese, which makes multiple types of dairy-free, gluten-free cheeses.

There are multiple companies in Kingston, Ulster County, and the greater Hudson Valley focusing on this Specialty F&B segment, and these companies may be seeking to expand existing facilities or to create multiple outposts. Additionally, as young professionals have moved from New York City, particularly Brooklyn, into the mid-Hudson Valley many have relocated or expanded their existing culinary businesses – or started new concepts. Two such examples are Kingston Wine Co. and Fleisher's Grass-Fed & Organic Meats. Retail demand, in the short to medium term, is likely to be from these Specialty F&B companies, as they seek to cluster in the Rondout. would be leased to Food & Beverage retailers, whether offering quick service or selling pre-packaged food. There should be an opportunity for communal seating overlooking the water, as sales per square foot for the F&B retailers tends to increase when there is an opportunity for outdoor, particularly waterfront, space.

- A smaller format grocery store. Several grocery stores are testing 15,000 20,000 SF "urban footprints" rather than the typical 30,000 60,000 SF grocery stores. These new concepts include expanded hot and cold prepared food bars, along with the typical offering of produce, dairy, meat/ fish, and dry goods.
- Hudson Valley Comparable Developments: Basilica Hudson (Hudson, NY): a 17,000 SF multipurpose space, hosting art/design events, flea markets, food festivals, concerts, and weddings.

OFFICE TRENDS

This section provides an overview of the office market in Kingston, which is comprised of two major sub-markets, the Uptown Stockade Area and the Downtown Waterfront Area.

KEY TERMS:

- Asking rents (NNN) range from \$10-15 per SF
- Office space tends to range from 2,500 to 20,000 SF

There is unlikely to be significant demand from "traditional" users of office space within the study area. Empire State Development has identified various sectors for growth potential in the Mid-Hudson Valley, including energy (high-technology, biotechnology and green technology), film television, financial services, advanced manufacturing, agribusiness, tourism and international opportunities. Not all of these sectors are applicable to the subject site. There are strong opportunities for the hightechnology and agribusiness on the subject site:

- 1 Given the proximity of the fiber optic network, there could be an opportunity to attract data centers or other companies that rely on high-speed connections.
- 2 As noted, there is an opportunity to capitalize on fostering agribusiness and becoming the conduit between famers and the New York City market. The abundance of fresh food and the proximity to innovation and young entrepreneurs at the Culinary Institute of America generates an opportunity for packaging companies, like Farm to Table Copackers, or industrial kitchens for co-production.

HOSPITALITY TRENDS

SUPPLY COMMENTARY

The hospitality industry in Kingston is segmented into the branded, hotel/motel market and the inn/bed & breakfast market. There is also a third, albeit informal segment, "Consumer-to-Consumer" market, which has risen over the last several years with the growth of companies such as AirBnB and VBRO. This section focuses on the branded, hotel/motel market and the inn/bed & breakfast market:

HOTEL/MOTEL MARKET

All of the hotel/motel supply in Kingston is clustered around highway junctions, whether to the west at the junction of the NYS Thruway and Highway 28 or to the north at the junction of Highway 199 and 9W. There are six hotel/motels in Kingston, totaling 679 keys. Over the next 2-3 years, the northern cluster at the junctions of Highway 199 and 9W will add two more properties (anticipated to add +/- 193 keys).



FIGURE 04.55 Branded Hotels/Motels Map

NAME OF PROPERTY	LOCATION	KEYS (#)	TYPE	AMENITIES	STATUS DELIVERY
Hampton Inn	Town of Ulster	90	Hotel	Fitness Center	Completed
Courtyard by Marriott	Town of Ulster	89	Hotel	Fitness Center	Completed
Residence Inn	Town of Ulster	92	Hotel	TBD	Under Construction 2016
Holiday Inn Express	Lake Katrine	101	Hotel	Water park	Under Construction 2017
Super 8	City of Kingston	84	Motel	N/A	Completed
Best Western (formerly Garden Plaza Hotel and Holiday Inn)	City of Kingston	212	Hotel	Ballroom	Under Renovation
Quality Inn	City of Kingston	144	Motel	Fitness Center, Game Room, Meeting Space	Completed
Rodeaway Inn	City of Kingston	60	Motel	Fitness Room, Outdoor Pool	Completed
		679			
		+/- 193			
		872			
	NAME OF PROPERTY Hampton Inn Courtyard by Marriott Residence Inn Holiday Inn Express Super 8 Best Western (formerly Garden Plaza Hotel and Holiday Inn) Quality Inn Rodeaway Inn	NAME OF PROPERTYLOCATIONHampton InnTown of UlsterCourtyard by MarriottTown of UlsterResidence InnTown of UlsterHoliday Inn ExpressLake KatrineSuper 8City of KingstonBest Western (formerly Garden Plaza Hotel and Holiday Inn)City of KingstonQuality InnCity of KingstonRodeaway InnCity of Kingston	NAME OF PROPERTYLOCATIONKEYS (#)Hampton InnTown of Ulster90Courtyard by MarriottTown of Ulster89Residence InnTown of Ulster92Holiday Inn ExpressLake Katrine101Super 8City of Kingston84Best Western (formerly Garden Plaza Hotel and Holiday Inn)City of Kingston212Quality InnCity of Kingston144Rodeaway InnCity of Kingston60Image: Hotel and Hotel and Hotel and Holiday InnCity of Kingston679Rodeaway InnImage: Hotel And Hotel	NAME OF PROPERTYLOCATIONKEYS (#)TYPEHampton InnTown of Ulster90HotelCourtyard by MarriottTown of Ulster89HotelResidence InnTown of Ulster92HotelHoliday Inn ExpressLake Katrine101HotelSuper 8City of Kingston84MotelBest Western (formerly Garden Plaza Hotel and Holiday Inn)City of Kingston212HotelQuality InnCity of Kingston144MotelRodeaway InnCity of Kingston600MotelFrom ComparisonCity of Kingston679+/- 193Super 8Super 8Super 8Super 8Super 8Super 8Super 8City of Kingston872Super 8	NAME OF PROPERTYLOCATIONKEYS (#)TYPEAMENITIESHampton InnTown of Ulster90HotelFitness CenterCourtyard by MarriottTown of Ulster89HotelFitness CenterResidence InnTown of Ulster92HotelTBDHoliday Inn ExpressLake Katrine101HotelWater parkSuper 8City of Kingston84MotelN/ABest Western (formerly Garden Plaza Hotel and Holiday Inn)City of Kingston212HotelBallroomQuality InnCity of Kingston144MotelFitness Center, Game Room, Meeting SpaceFitness Room, Outdoor PoolRodeaway InnCity of Kingston60MotelFitness Room, Outdoor PoolFitnestFitness Room Outdoor Pool479141193MotelFitness Room Strater679141193MaterKarse142872141141

FIGURE 04.56 Branded Hotels/Motels Key Information

INN/BED & BREAKFAST MARKET

The inn/bed & breakfast supply in Kingston is clustered on North Front Street in the Stockade District or down in the Rondout. These two areas of town have lent themselves well to the rehabilitation of historic space for the hospitality market. Indeed, all of the inn/bed & breakfast supply is repurposed space on the upper floors of businesses (operated by the proprietor of the ground floor business), rehabilitated Victorian homes, or rehabilitated special purpose buildings (ie. firehouses). In total, there are eight inn/bed & breakfast properties in Kingston, totaling 19 keys.

Map #	Name of Property	Street	Keys (#)	Amenities	Status Delivery
Rondout District					
1	Rondout Inn	Broadway	2	Kitchen, WiFi	Completed
2	The Gallery Inn	Broadway	1	Kitchen, WiFi	Completed
3	Firehouse Inn	Abeel	1	Suite	Completed
4	Maison Bleu	W. Chestnut	5	Renovated Victorian Home w/ Pool	Completed
Stockad	le District				
5	Suite Dreams	N. Front	2	Rooftop Balcony	Completed
6	The Inn at Boitson's		2	Full Kitchen	Completed
7	Schwartz's Inn	N. Front	2		Completed
8	A Kingston B&B at Thomas L. Southwick House	Fair	4	Marble Bathrooms; Country Breakfast	Completed
Total			19		

FIGURE 04.58 Inn / Bed and Breakfast Properties Key Information



FIGURE 04.57 Inn / Bed and Breakfast Properties Map

RECOMMENDATIONS FOR KINGSTON WATERFRONT

Based upon discussions with General Managers at hotels/motels in Kingston, the lack of hotel supply at the Rondout, community stakeholder feedback, and our understanding of hotels as "place-makers and catalysts," the project team recommends:

UPSCALE HOTEL

A 125-150 key upscale hotel catering to the Meetings, Incentives, Conferences, Events (MICE) business. This tourism segment is characterized by large groups, often planned in advance, for a specific purpose. For example, the MICE market could cater to a wedding ("Event") or to a corporate retreat ("Incentive"). The proposed hotel property should be designed such that majority of its rooms and suites have views overlooking the water to drive higher Average Daily Rates. The property's design should convey the vernacular of the Hudson Valley, as tourists, travelling for whatever purpose, are increasingly seeking authentic, and hyper -local experiences. It should include amenities such as a restaurant, spa, ballroom, meeting space, and fitness center. The hotel should offer activities for guests including sunset sails along the Hudson River, hot air balloon rides, hikes/horseback rides in the Catskills, and other unique experiences. Similarly styled hotels include The Sanctuary (South Carolina) and Keswick Hall (Virginia), both owned and operated by the Virginia Investment Trust, and Woodstock Inn (Vermont), owned and operated by The Rockefeller Foundation.

BOUTIQUE HOTEL

In order to draw tourists to the site, a boutique art hotel with 15-30 keys should be incorporated into the master plan. A similarly styled hotel is the ACE Hotel. The Hudson Valley has several boutique hotel properties, the majority of which are upscale; however, this unique art concept would serve to capitalize on the artists' community in Kingston. This hotel would serve a distinctly different segment than the proposed upscale hotel, but would also serve as a strong "place-maker."

Hudson Valley Comparable Developments:

- Roundhouse at Beacon Falls (Beacon, NY): 14 keys
- Diamond Mills (Saugerties, NY): 30 keys

TRANSPORTATION AND ACCESS

As with so many cities, the key to Kingston founding, and later, its growth, development and current conditions can be linked to its transportation and access. The original growth and development of Kingston was based on its location on the Hudson River when the Hudson was used as a major pathway between New York City and Albany. This, of course, also contributed to the state of the Rondout today; which is an underutilized area due to the downturn in use by industry.

However, access and transportation can once again be part of the revitalization of Kingston. Being so close to Poughkeepsie, the end of the Metro North commuter rail line, allows the City of Kingston to be a convenient; and less expense; location for many New Yorkers to move to while still having easy access to the City.

In addition to the Metro North access the City of Kingston has excellent access via surface transportation lines and of course the Hudson River. Kingston the Rondout area's ties to transportation will allow the planned revitalization of the BOA Area to be realized by allowing residents, both new old, visitors, both via the train or via the Hudson, to enjoy the planned growth and development of the Waterfront.

This sections further details the transportation and access of the City of Kingston.

REGIONAL CONNECTIVITY

VEHICLE ACCESS

The nearest bridge connecting Kingston to the east bank of the Hudson River is just over four miles to the north, on New York State Route 199. The New York State Thruway (Interstate 87) passes through the western part of Kingston, while U.S. Highway 9W runs north-south through the city.

AIRPORTS

Kingston-Ulster airport, located at the western base of the Kingston-Rhinecliff Bridge, serves the area. The major airports closest to Kingston are Stewart International Airport in Newburgh, 39 miles to the south, and Albany International Airport, about 65 miles north. The three major airports serving the City of New York metropolitan area, John F. Kennedy International Airport, Newark Liberty International Airport, and La Guardia Airport, are approximately 93, 86, and 80 miles to the south, respectively.

RAIL

While passenger rail service to and from Kingston was discontinued decades ago, there is a Rhinecliff-Kingston Amtrak station 11 miles away, and a Poughkeepsie Amtrak/Metro-North station 17 miles away. Freight rail service through Kingston is operated by CSX Transportation on the River Line Subdivision, and there is a small rail yard of about 7 tracks in the city. Commuter bus service between Kingston and New York City is available daily.



FIGURE 04.59 Regional Connectivity Map

FERRIES

Water taxi service between Kingston and Rhinecliff operates on weekends from May through October.

KINGSTON GREENLINE

The Kingston Greenline comprises four separate sections across the City of Kingston. The Wallkill Valley section establishes a route that will eventually link Midtown to Rosendale, New Paltz, Gardiner, Highland and Poughkeepsie.

The Uptown section is the gateway to the Rondout Valley, via the O&W Link Trail, and the Catskill Mountains, via the proposed Catskill Mountain Rail Trail.

VEHICLE NETWORK

Kingston's waterfront area is accessible via an interconnecting network of local streets, state highways and the interstate system. N.Y. Route 9W crosses the Rondout Creek at Kingston. This portion of 9W is part of the proposed Scenic Roads System for the Hudson Valley.

BRIDGES

Three bridges span the Rondout within Kingston's BOA. They include the West Shore railroad trestle, Port Ewen Suspension Bridge, and the Route 9W Bridge.

VEHICLE ACCESS

The Rondout waterfront is easily accessible to motor vehicles via city streets and highways. Abeel Street, closely parallels the waterfront for much of its length. Dock Street, West Strand and East Strand connect with Abeel Street to form a continual route for the entire length of the City's waterfront between Wilbur and Kingston Point. This east-west street system connects with north-south routes which, in turn, connect with other regional transportation routes including New York State Routes 32 and 28 and N.Y. Route 9W. Route 9W also connects with the New York State Thruway, part of the nation's interstate highway system. The waterfront's accessibility via streets and highways is a positive factor in encouraging use by residents and tourists alike.

PARKING

As part of the BOA Step 2 planning process, the City commissioned a parking strategy addressing needs of the adjacent Rondout area and parts of the BOA. The results of the study indicate that there is currently a marginally sufficient supply of parking within the Rondout Study Area.

- Peak occupancy rates during the weekday: 34% 40%
- · Peak occupancy rates during the weekend: 56%

The Step 2 report projected that anywhere from 1,656 to 1,956 additional parking spaces may be required to accommodate future development assuming a full build out of the BOA and based on a conventional approach to calculating parking needs.

The Parking Study recommends:

- Movement away from conventional parking solutions to parking management strategies.
- A shared parking approach to the provision and management of future parking as it is developed in the BOA.
- That the City should adopt/develop the following long and short term parking management strategies.

SHORT TERM RECOMMENDATIONS 1 – 2 Years

• Provide Parking Information to Users

- Adopt a Special Event Parking Management Plan
- Create Shared Parking Opportunities
- Provide Bicycle Facilities

LONG TERM RECOMMENDATIONS

5 – 10 Years

- Expand Trolley Services
- Develop Remote Parking Facilities
- Redesign Existing Parking Facilities
- Regulate Parking
- Improve Pedestrian Conditions
- Address Spillover Parking



FIGURE 04.60 Vehicle Map

TRANSIT, BICYCLE, AND PEDESTRIAN NETWORK

BUS LINES

Bus service within Kingston is provided by the city-owned CitiBus system, while service to other Ulster County locations is offered by Ulster County Area Transit (UCAT). Boasting a thriving arts community, the City of Kingston offers the service of an "art bus," usually a CitiBus tourist trolley, which, on the first Saturday of every month, takes riders on a guided tour of the city's art galleries, all of which have openings on such days.



FIGURE 04.62 Kingston Trolley

TROLLEY

The City is planning for expanded trolley services to serve the entire waterfront, and ultimately, provide regular weekend, holiday and event service throughout the year, operating with 15 or 20 minute headways between trolleys to make the service an attractive circulation option for visitors. The plan also calls for trolley services to connect the waterfront with mid-town Kingston via Broadway and Hasbrouck Park. Because 52 percent of commuters travel less than 15 minutes to work, it may be appropriate to offer weekday trolley services if demand warrants. Recent improvements along East Strand provide an excellent example of improved pedestrian conditions. The recent development of a multi-use trail, improved sidewalk conditions, and the

narrowing of the roadway (through diagonal parking) has efficiently increased parking capacity and provided for a more friendly pedestrian experience – encouraging overall pedestrian usage.

KINGSTON GREENLINE

The Greenline will be a combination of shared use paths, sidewalks, and on-road bicycle accommodations and will be made of four sections: the Wallkill Valley section, the Rondout Section, the Uptown Section, and the Midtown Hub.

In the Rondout, the Kingston Greenline will connect Midtown to the Rondout Creek, the lower Broadway business district and the Hudson River.

Starting as a multi-use trail, the Greenline will link neighborhoods across busy US Route 9W with parks and schools. One segment along East Strant has been constructed. At East Strand, the trail will give way to on-street connections that link Broadway and the existing Rondout Promenade to North Street and Delaware Avenue. Additionally, the segment that extends to Kingston Point Park has been constructed as a pedestrian trail. Farther up North Street, the trail will connect with the proposed Hudson Landing Promenade.

In Uptown Kingston, the Greenline provides a protected pedestrian and bicycle link from midtown to the Kingston Plaza and the Stockade business district.

Midtown Kingston, along the center of the region's railroad network, is a natural hub for the growing network of trails in Ulster County.

A network of shared and dedicated bicycle and pedestrian pathways is envisioned as part of the City's overall complete streets initiative.



FIGURE 04.63 Transit / Bike / Ped Map

WATER ACCESS

Kingston was once a busy transportation hub, with the Hudson River, Rondout Creek, and the Delaware and Hudson Canal all serving as significant commercial waterways. The Rondout was, in fact, the terminus of the D&H Canal, with the canal transporting coal over the Shawangunk Mountains to the Hudson. From here, the canal barges were unloaded and the coal transferred to river boats that took it down to New York City.

This burgeoning water traffic prompted the construction of a lighthouse at the mouth of the Rondout Creek, a necessity to warn captains of the dangers of the shore and the shallow tidal flats surrounding the mouth of the Rondout. The first two lighthouses were located on the south side of the Rondout Creek. The first of the two, a wooden structure, was destroyed by fire. The second lighthouse, Rondout I, a stone structure, was abandoned in 1915 and demolished in 1953. The foundation is still visible.

The current Rondout II Lighthouse is located at the eastern end of the entrance dike, where the dike begins to extend northward. It was built in 1915. Its predecessors, built in 1837 and 1867, were located on the south side of the southern dike of the channel entrance.



FIGURE 04.64 The Delaware and Hudson Canal



FIGURE 04.65 Water Access Map

MOORING FIELD PROPOSED LOCATIONS

The entire extent of Rondout creek within Kingston City limits was studied for proper placement of mooring fields. The proposed locations for this harbor infrastructure have been identified as openings in the main navigational waters on the right bank of the creek across Island Dock, and across the cities Cornell building. These locations serve as optimal areas for vessel anchoring due to their inland outline and ground transportation accessibility. These benefits prove essential in significant weather events where water levels become highly volatile towards the center of the channel. The locations depths range 10-13 feet, which suffices for private and recreational smaller to moderate sized vessels. In addition, the amount of vacant land in proximity to these locations could be repurposed to serve these docking facilities. The mooring fields would be directly visible from the city of Kingston busy waterfront and be aesthetically pleasing due to its encouragement of marine activity.

COMMERCIAL WATER TRANSPORT

In addition to local commercial transportation activity, the Kingston harbor hosts larger commercial vessels that have significant influence on the local economy. American and Blount, two cruise lines, dock within the harbor on a regular basis, with ships ranging from 184 ft to 215 ft. Annual commercial cruise visits have been recorded on an average of 20-25 separate dockings. While each vessel provided the town with approximately 100 individuals, about 1500 people pass through the city of Kingston annually.





DEEPWATER PORTS

Kingston's waterfront offers one of the best harbors along the length of the Hudson River with potential for more than 2,000 feet of deepwater dockage space from the Cornell Building along the former Steelhouse Restaurant (now Ole Savannah) and past the Hudson River Maritime Museum to the new 9W Bridge. Regular visitors to this area are Tall Ships such as Clearwater, Half Moon, Ernestina (official vessel of the Commonwealth of Massachusetts) and many other historic vessels. The waterfront is also home to Fleet Obsolete's collection of historic WWII PT Boats and historic Tugboats. There is unlimited historic maritime development potential such as Mystic, CT.

Source: Rondout Harbor Management Plan, 2014



FIGURE 04.66 Deepwater Ports

Name	Dist.	Depth	Amenities
Kingston City Marina	150'	8'-12'	Electricity, water, pump-out services, showers, restrooms, marine repair facility
Rondout Bay Restaurant			150-slips, no-wake zone, dockage, indoor and outdoor dining, swimming pool, land and water winter storage for winter (includes hauling, towing, washing, blocking, and spring launch), seasonal trailer storage, crane, forklift, pumping, haul, launch, block, load/unload services, and pressure-washing
Rondout Landing Marine Terminal SIte D Dock	120'	9'	Dock is used for boarding river-excursion passengers
KOSCO Terminal			Connected via three pipelines to five steel storage tanks at the rear of the facility, with a total capacity of nearly 88.4 thousand barrels. Owned by Getty Realty. Site is available for redevelopment.
Port Ewen Dock	150'	9'	
Kingston Point Terminal Dock	250'	13'	Three pipelines connect this wharf to 13 steel storage tanks with a total capacity of over 89.6 thousand barrels. Owned by HeritagEnergy Corporation and operated by Kingston Point Terminal Corporation to receive petroleum products by barge.
Thomas J Feeney Enterprises dock	290'	7'-20'	Mooring for floating dry docks and vessels for repair, 1200-ton floating dry dock, 2400-ton dry dock. 20-foot dredged basin allows operation of floating dry docks off the bulkhead. Privately owned and operated by Thomas J Feeney Enterprises.

FIGURE 04.68 Table of area deepwater ports



FIGURE 04.67 Kingston City Marina

INFRASTRUCTURE

The following section will go into more detail about the existing infrastructure of the BOA Area. At present, utilities on the Rondout waterfront area are underutilized. Business and industry in this area have declined during the last century, and that trend has dramatically reduced the demand on utilities in this section of the City. Because of this circumstance of the growth and later decline of the area there is appropriate infrastructure to support revitalization of the area; however, it is not that simple and the team has done research into the state of the various infrastructures and will report on those in the following section.

WATER

The Kingston Water Department, established in 1895, is an autonomous and financially independent department within the City of Kingston. It is governed by a Board of Water Commissioners and each is appointed by the Mayor to a five-year term. The daily operation of the department is under the supervision of the Superintendent.

The water system consists of a series of upland reservoirs and transmission mains that supply the City's Edmund T. Cloonan Water Treatment Plant in the Town of Woodstock. This facility, an American Water Works Historic Landmark, was constructed in 1897. It uses direct, in-line pressure filtration with alum coagulation, chlorination and calcium carbonate for pH adjustment. It has a nominal capacity of 8 million gallons per day (MGD) and produces, on average, 4 MGD. Approximately 100 miles of cast iron and ductile iron pipe comprise the distribution system that serves the City of Kingston and IBM facility in the adjacent Town of Ulster.

At present there are about 8,500 service connections and 1,000 fire hydrants in the system. With the exception of two small high-pressure districts, all flow from the City's reservoirs to the consumer's tap by gravity. The City's public water supply services most of the waterfront area. The area, once occupied by the cement plant on the Hudson River, is the only one not serviced by public water. This availability of public water is a positive factor in determining the feasibility and desirability of development projects of all types (industrial, commercial, residential) along the waterfront and within the BOA.

SANITARY SEWER

Most of the City of Kingston is served by municipal sanitary and storm sewers. The sewage treatment plant currently has a capacity of 4.8 MGD and improvements are currently underway to increase this to 6.0 MGD. In addition the City conducts a federally mandated pre-treatment program to monitor specific users for discharge of pollutants into the sanitary system. Most of the Kingston waterfront along the Rondout is serviced by sanitary sewers. The City is continually upgrading the sanitary sewer system and has been concentrating on renewal areas such as the Rondout, West Strand and Ponckhockie neighborhoods. Originally a combined sanitary and storm system was built in Kingston. The City is now in the process of separating these two lines. Currently pollutants are discharged into the Rondout Creek during heavy rainstorms when storm runoff generates flows that exceed the capacity of the sewage treatment plant. Continued separation of these two systems will reduce frequency of this discharge and eventually eliminate it. As part of a program to update its sanitary sewer system and eliminate pollution of the Rondout Creek, the



FIGURE 04.69 Aerial View of Kingston's Waste Water Treatment Plant

City has completed projects to correct situations where direct sewage discharge had occurred at Wilbur Avenue, North Street/East Strand area, Hudson Street, Block Park and at the waste water treatment plant.

Kingston's wastewater treatment plant located in the center of the BOA had an odor problem that has been mitigated through installation of new equipment, filtration and improved processed. The City has invested over \$2.5 million in the upgrades and has a long term contract for sludge control.

SOLID WASTE TREATMENT

There are no active landfills within the City of Kingston's waterfront area. Solid wastes are disposed of outside the BOA and the City's corporate limits.

STORM DRAINAGE

Currently the City has a combined sanitary-storm system. As improvements in the overall system area made, sanitary and storm systems will be separated. The Rondout Creek waterfront is also serviced by a storm drainage system in the same general areas serviced by the sanitary system. Areas not serviced by storm sewers, such as the Wilbur Avenue area and the Hudson River, utilize natural drainage channels and runoff patterns.

Rainfall is expected to become more intense, and periods of heavy rainfall are expected to become more frequent. The Northeast Regional Climate Center (NRCC) reports that severe precipitation events that once occurred with a 1 percent chance in any given year are now likely to occur twice as often.

MARINE INFRASTRUCTURE

The waterfront planning process included a detailed assessment of marine infrastructure for the Rondout Creek and Hudson River. The assessment included an evaluation of the presence and condition of the Rondout Creek bulkheads and the bulkheads along the west bank of the Hudson River adjacent to the Brickyard and the Tilcon properties. The conditions evaluation also addressed the condition of the Kingston Point Causeway, the potential for pedestrian access along the jetty leading to the Kingston Lighthouse and Hudson River water depths. The City of Kingston Waterfront Conditions Assessment is

ASSESSMENT



FIGURE 04.70 Kingston Wastewater Treatment Plant

incorporated by reference and available at Kingston City Hall.

EAST STRAND

The City of Kingston intends to lay the groundwork for redevelopment of the East Strand waterfront through the physical construction of infrastructure, zoning and policy changes, economic development, and tax incentives to potential developers. Implementation of an effective stormwater management system and standardization of the East Strand roadway elevation will enhance the development potential of the East Strand area. The purpose of this study is to understand the causes of the periodic flooding of the roadway and surrounding area and to develop a plan to mitigate it to the extent possible. The specific goals of this study are:



FIGURE 04.71 Kingston Watersheds

- 1 Identify and quantify the contributions to flooding in the East Strand Street waterfront area that riverine, tidal, and stormwater influences have under current conditions.
- 2 Discuss the potential for flooding to worsen under future conditions based upon the influence of SLR and the trending increase in frequency and magnitude of heavy precipitation events.
- **3** Provide potential solutions and recommendations for the future adaptation of the East Strand area to minimize the frequency and severity of flooding along the waterfront.

KNOWN ENVIRONMENTAL CONDITIONS

For this study, the team did not undertake any new environmental testing or evaluations, the scope of the project included using existing environmental condition assessments that have previously been completed. This includes studies completed during the Step 2 BOA process and studies that were funded through other sources in the time since the Step 2 was completed. The following section discusses those previous studies that have been completed in order to create a clearer picture of the known environmental conditions in the BOA Plan area.

KOSCO ASSEMBLAGE

Existing contamination issues for the KOSCO Assemblage site (KOSCO) are identified and discussed in the Step 2 Nomination Study (Map 15 - Strategic Sites and Appendix 4) and further discussed in Section 4.h (Strategic Sites) and Section 5 (Design Framework) of the current BOA Plan. When last used, the KOSCO site was the base for 25 technicians for residential and commercial heating customers and a marine fueling terminal. The bulk petroleum storage tanks have since been removed from the site. The site is surrounded by a chain link fence and includes four one-story structures. The NY State Police, Ulster Country Sheriff's Department and the NY state DEC currently dock their emergency response vessels at this site.

Groundwater monitoring wells were noted throughout the property during the site visit (conducted as part of the 2001 Phase I ESA), as well as stained soils in areas of the former bulk storage tank areas. This site has had a history of responsible operation by onsite managers. Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

THE LANDING

As presented in the Step 2 Nomination Study (Section III.C.2.b.i and Appendix 4), an ESA was performed at the site in 2001. The ESA identified the presence of construction debris and unknown fill material onsite; the site was formerly used as a marina which may have included fuel storage as part of its operations; and there is a potential that contaminated groundwater from the adjacent site (former manufactured gas plant) may have migrated to the Landing site. Based on the 2001 ESA, a 2005 Site Characterization Investigation of the site was performed. The investigation identified Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds SVOCs and elevated metals exceeding New York State Department of Environmental Conservation (NYSDEC) standards were found in soil and groundwater on the western one-third of the property (possibly attributed to the current and historic operations of the western and northern adjoining properties). Any contamination emanating from adjoining property owners is the responsibility of those adjoining property owners to remediate.

Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

MILLENS & SON SCRAP METAL RECYCLING

According to the 2008 Phase I ESA performed for The Landing Site (Appendix 4 of the Step 2 Nomination), Millens Scrap Yard is identified as a delisted Inactive Hazardous Waste Disposal Site. This facility (site code 57480) has soils contaminated with Polychlorinated Biphenyls (PCBs), petroleum, and metals. Groundwater is also contaminated at the site and the plume has migrated off-site. The site is also listed as a Petroleum Bulk Storage, Chemical Bulk Storage, and Aboveground Storage Tank site. Six spills were reported at the Millens scrap yard. The spills mainly involved oil run-off associated with car crushing operations, with one spill associated with an unknown 55-gallon drum. One of the spills (NYSDEC ID 9604764) from the car crushing operation remains open in the NYSDEC database. There is known contamination at this property associated with the car crushing operation (Appendix 4 of the Step 2 Nomination).

There have been several investigations performed since 1996 at the site to delineate the location and depth of contamination. A Remediation Investigation/Feasibility Study was submitted in 2004 including recommendations for excavation of the PCB-contaminated soil, active in-situ remediation of VOC contaminated soil, and eventual capping of remaining areas. Soil vapor extraction was required to be completed and operational by April 2005. During June and July 2007, additional soil investigations were performed. The results of this investigation found one VOC in one location, SVOC exceedances in subsurface soils, and metals. Barium, chromium, lead, VOCs, benzene and Methyl Tertiary Butyl Ether (MTBE) were detected in groundwater at several wells. SVOCs were detected in an off-site well. In June 2008, the NYSDEC listed the site as a Class 2 Inactive Hazardous Waste Site. NYSDEC performed a Remedial Investigation of the site during 2012 to 2013. VOCs, SVOCs, metals, and PCBs were detected exceeding their applicable standards in subsurface soils. SVOCs and PCBs were detected in surface and subsurface soils off-site. VOCs were detected in groundwater in the southern portion of the site.

In May 2015, a Citizen Participation Plan was generated for the site. According to the Plan, an Interim Remedial Measure for in-situ treatment of groundwater and residual soil contamination at the site is currently being developed under a NYSDEC Consent Order.

BLOCK PARK/ISLAND DOCK

Upon a search of the NYSDEC Spill Incidents Database, there was one spill listed for this site. Spill #0906182, Block Park, is listed as a raw sewage spill in the soil which occurred on August 8, 2009. The spill was closed on August 8, 2009.

Phase I and Phase II Environmental Assessments were performed for the Block Plant and Island Dock sites. According to the Limited Phase II Environmental Site Assessment, Former Concrete Block, Inc. Facility (Island Dock), Kingston, New York, July 2005, environmental conditions for the sites include: historical use of the site as a coal storage yard; electric transformer casings that may have impacted surrounding soil on the island; scrap metal and wood debris located onsite; and petroleum releases were noted in nearby areas and upgrade from the site.

The Phase II field investigation at the former Block Plant facility and Island Dock site consisted of Geoprobe[™] borings and test pits to collect surface and subsurface samples. A supplemental round of surface soil sampling was also performed following the initial field work. The analytical results of the field investigation resulted in the detection of VOCs and SVOCs in the surface soils. Metal concentrations along with SVOCs were detected at levels marginally exceeding their respective NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 Criteria. The most likely remediation plan at Island Dock will be installation of a membrane covered with soil capping.

SVOCs were found at both the former Block Plant Factory and the Island Dock site. SVOCs were also detected in the location of a former aboveground petroleum storage tank.

Evidence of coal and coal slag were found in borings obtained from the Island Dock site. Low-levels of VOCs were identified in the area of the former Block Plant Factory.

The Island Dock site is currently in the Brownfields Cleanup Program (Voluntarily). Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

NOAH HOTEL

A search of the NYSDEC Spill Incidents database found that there was one reported spill associated with the site. The spill is listed in the NYSDEC Spill Incidents Database as Construction Site/AKA Noah Hotel. The spill is dated October 28, 2005 and was identified as unknown petroleum. The spill was closed on January 20, 2010. At this time, there is there are no additional environmental records or known environmental investigations related to this site.

ENVIRONMENTAL REMEDIATION OPPORTUNITIES

As illustrated in this map, many parcel sites within the BOA area have evidence of historic contamination. As a result, some of these properties are enrolled in the Brownfields Cleanup Program to take advantage of remediation incentive tax credits. Other properties do not qualify for the Brownfields Program because they have no significant contamination. This map highlights the varying degrees of possible environmental remediation, mostly from petroleum, which is subject to tidal flushing. However, any such environmental conditions can be mitigated. The DEC remains an important guiding force in appropriate future redevelopment of these sites. The map data is based on historic use patterns of the waterfront and adjoining areas.



FIGURE 04.72 Ringston Waternonit Containination Risk



POTENTIAL CONTAMINATION TYPE

This map illustration accompanies Figure 04.72 and offers an analysis of potential contamination types based on current and historical site use. Contamination along the Kingston waterfront ranges from heavy metals to dissolved inorganic to persistent organic pollutants (PCB, PFC) to Volatile and semi-volatile organic compounds. Understanding the historic contamination types provides potential opportunity for future remediation strategies—including bioremediation, phytoremediation, and cut and fill operations.



FIGURE 04.73 Waterfront Contamination Type



OTHER PLANNED OR ON-GOING DEVELOPMENT PROJECTS

The intent of the BOA program is to leverage planning work done to date and to advance and unify previous plans and activities. The City of Kingston has invested a significant amount of resources and time in planning around the waterfront. Many of these studies overlap and have common goals for revitalization. The City's efforts to define a future land use plan and revitalization strategy for the Brownfield Opportunity Area reflects the City's collaboration with many public and private partners and its commitment to a sustainable and vibrant waterfront.

The vision and goals developed during the Pre-Nomination Study form the basis for future investments and activities at public and private levels. The Step 2 BOA Nomination and Step 3 BOA Implementation Plans draw from prior planning initiatives, identifies commonalities, focuses on environmental conditions, fill gaps in analysis and creates a unified framework for implementation. In a parallel study, and in an effort to unify planning strategies and recommendations the City is currently undergoing an update to its Comprehensive Plan, expected to be finished in 2015. The Step 3 BOA Implementation Plan is not intended to be a Comprehensive Plan but instead is supposed to set out a vision and recommendations to spur redevelopment of the BOA Area and is intended to provide flexibility within a framework that complements the ongoing Comprehensive Plan.

This BOA Program builds upon a series of important planning initiatives which are incorporated by reference and available at Kingston City Hall:

PLANNING DOCUMENTS

- Kingston 2025: Comprehensive Plan ongoing
- Kingston Midtown Revitalization Plan 2014
- Kingston Climate Action Plan Sept 2012
- Revitalizing Hudson Riverfronts 2010
- Kingston Urban Cultural Park Final Report (Heritage Area Plan) June 1987
- Rondout Local Waterfront Revitalization Program October 1993
- Rondout Waterfront Development Implementation Plan 2002
- City of Kingston-Brownfield Opportunity Area Step II Narrative
- Rail Reconstruction & Electrification Study May 2008
- Ferry Feasibility Study 2010
- Economic Impact Analysis
- Catskill Mountain Rail Trail Economic Analysis June 2013
- SCENIC HUDSON Revitalizing Hudson Riverfronts
- Ulster County Transportation Council Plans (Various)
- Energy and Greenhouse Gas Emissions Inventory 2012
- Central Broadway Plan
- Broadway West Plan
- Hudson Landing Proposed Development Design Book
- Land Use and Zoning Analysis for County Owned Properties in the City of Kingston and Town of Ulster
- Economic Base Diversification
- Tidal Rondout Creek Watershed Management Plan Oct 2015 Draft
- Planning for Rising Waters Sept 2013



FIGURE 04.74 Selected Overlapping Studies

KINGSTON CONNECTIVITY PROJECT DOCUMENTS

- Kingston Greenline Conceptual Plan March 2014
- Kingston Connectivity Conceptual Map 2013
- Kingston Connectivity Project Overview 2013
- Transportation Enhancement Program Application 2013
- Hudson Landing Promenade Project Site Plans August 2013
- Kingston Point Rail Trail Engineering Study March 2013
- Kingston Bluestone Sidewalk Survey Report November 2013
- Kingston Point Rail Trail Survey Maps

RONDOUT WATERFRONT CURRENT INITIATIVES

- Kingston Rondout Harbor Management Plan Draft May 2014
- East Strand Stormwater Management Analysis Oct 2013
- Rondout Parking Feasibility Study Sept 2013
- East Strand Streetscape Concepts Draft Sept 2013
- Cornell Building Streetscape Improvements April 2014
- Kingston Tidal Waterfront Flooding Task Force Final Report Sept 2013
- WWTP Streetscape Screen Set of Drawings
- WWTP Streetscape Screen Bid Docs
- Rondout Creek Tidal Watershed Management Plan

KINGSTON TAX STUDIES

- Homestead Non-Homestead Study Presentation April 2014
- Kingston Homestead Tax Study Full Report March 2014

As the previous list suggests, there has been a tremendous amount of thought, time and funding put into a range of issues around Kingston. From that list, these are some of the recent and on-going studies that are critical to understand what will have direct impact on the revitalization of the Rondout Waterfront.

CITY OF KINGSTON-BROWNFIELD OPPORTUNITY AREA STEP 2

The BOA Step 2 is the legal nomination of the study area. The current Step 3 will need to build off of the ideas established, including the identified strategic sites and strategies.

The Kingston waterfront vision defined in this document states: "The Kingston waterfront will be an attractive, active, walkable, culturally vibrant district with strong linkages to the rest of the City of Kingston." Shops, restaurants, recreational opportunities, museums, and events will attract visitors and residents seven days per week all through the year. New development will be consistent with established character and will highlight the area's historic and natural resources. Trails, parks, marinas, and boat launches will maximize access to the waterways, creating high-quality recreational opportunities, and optimizing meaningful, permanent public access to the waterfront.

It is also important to note that this study was completed in 2010 and the information provided will need to be validated to ensure relevance and that we are addressing current trends.

KINGSTON 2025: A PLAN FOR THE CITY OF KINGSTON

The City of Kingston is looking towards the future and has undertaken the update of its Comprehensive Development Plan, which currently dates back to 1961. This plan is being updated in parallel to the BOA study. While the comprehensive plan is an independent exercise ideas developed in the BOA Step 3 do have the
potential to influence decisions and policy being developed in the larger plan. On October 9, 2014 the "Vision for the Future and Planning Needs" was presented as a conclusion and results of the Phase One Reconnaissance for the City of Kingston Comprehensive Plan. This is a critical step in forming the comprehensive plan expected to be completed next year.

WASTE WATER TREATMENT PLANT STUDY

An ongoing study to understand the existing conditions of this critical infrastructure. A range of scenarios are being explored from necessary upgrades to opportunities to relocate.

RONDOUT PARKING FEASIBILITY STUDY

As part of the BOA Step 2 planning process, the City commissioned a full parking study to create a strategy addressing needs of the adjacent Rondout area and parts of the BOA.

KINGSTON TIDAL WATERFRONT FLOODING TASK FORCE

Created in July 2013 by the Mayor to assess local risks of rising waters and flooding and to generate strategies that will help create a more vibrant, secure and prosperous waterfront.

KINGSTON CLIMATE ACTION PLAN

Created in September 2012 to reduce local greenhouse gas emissions. This plan is a comprehensive energy assessment and GHG emissions inventories for both the community and government operations.

KINGSTON GREENLINE

A March 2014 document proposing a network of urban trails, complete streets including direct links along the trolley line within the study area.

KINGSTON HARBOR MANAGEMENT PLAN

Created in June 2014 this document is a comprehensive conditions report of the harbor and edge conditions created by the US Army Corps of Engineers.

SCENIC HUDSON REVITALIZING HUDSON RIVERFRONTS

A partnership with the City of Kingston and Scenic Hudson and serves as an illustrated guide, designed to inspire and inform all who wish to create vibrant waterfront communities. Outlines principles and implementation strategies for waterfront revitalization that are adaptable to your community's character and circumstances.

DEVELOPMENT PROJECTS IN PROGRESS

The tremendous opportunity around the waterfront are already being seen at the time of the BOA Plan Step 3 documentation. A variety of project types are being developed within and around the BOA boundary that will help in the revitalization of the area. These include cultural institutions, infrastructure upgrades and residential, recreation and commercial developments. This is a reconfirmation of the commitment of the community which will have an immediate impact on the waterfront, bringing more people and diversity to the waterfront and creating further stability around progress. The various projects have been accounted for in the market scan and absorption assumptions when evaluating the implementation strategy.

The following projects are a sample of key projects currently in-progress at the time of the report.

• Riverport Wooden Boat School

The Hudson River Maritime Museum is expanding its footprint by developing at 86 Rondout Landing. It is developing a year-round education, working and teaching facility focused on wooden boat building and other working waterfront education.

- Maritime Museum Solar Installation New solar power panels are being applied to the roof of the Maritime Museum creating a more sustainable building and commitment to a resilient Rondout District.
- Irish Culture Center Hudson Valley- New Center
 A new 15,000 square foot facility is being planned at Abeel Street in Kingston's
 Rondout District. The Irish Cultural Center Hudson Valley purchased the land in
 2013 and are currently fundraising and designing. Planned completion is 2017.
- Church Residential Conversion Located at 50 Abeel Street the former church turned restaurant was purchased over three years ago. It is currently being converted into 7 apartments
- Kingston Greenline

Recent funding of \$1.6 million grant is allowing further development and implementation of the network of urban trails, bikeways, water-trails, walkable sidewalks and complete streets that strive to better connect various Kingston communities. The Kingston Connectivity Project is currently underway.

• Kingston Point Upgrades

Overgrown vegetation has been cleared. New picnic tables and bike racks have been installed out on the causeway and a new pathway has be laid down. A new shower and changing builind, with accompanying landscaping has been built at Kingston Point Beach.

- East Strand Streetscape Improvements Upgrades to the asphalt pavement and sidewalks was recently completed greatly enhancing the experience on East Strand in the vicinity of the Cornell Building.
- Kingston Community Rowing

Kingston Community Rowing will administer and promote rowing programs based on the US Rowing America model involving the Rondout Rowing Club and the Kingston High School Crew team. A permanent base for the rowing community in the form of a Boat House and launch site on the Rondout Creek is proposed. The Boat House would provide boat storage as well as classroom and community space for outreach programs and could also be used for rentals of kayaks and bicycles, as well as a base for small boat sailing instruction.



FIGURE 04.75 Riverport Wooden Boat School



FIGURE 04.80 Kingston Point Improvements



FIGURE 04.76 Irish Cultural Center Hudson Valley



FIGURE 04.77 Kingston Green Line



FIGURE 04.79 Church Residential Conversion



FIGURE 04.78 East Strant Streetscape Improvements

STRATEGIC SITES

Five strategic sites have been identified in the BOA designation process. They can anchor future development efforts and are the key parcels necessary for the overall redevelopment plan to be completed most efficiently. Based upon the Phase I Site Assessments, the City of Kingston and its partners identified three priority assemblages. These sites were selected because they are strategically located, preferred by the neighborhood, have a high capacity for redevelopment, can catalyze other economic investment, and have historical uses that indicate a significant chance of environmental contamination which requires additional investigation.

Phase I Environmental Site Assessments have been completed for at least two of these properties. While some concerns have been identified and future analysis is necessary, none of the findings represent an obstacle to redevelopment. The willingness of property owners to work through the Voluntary Clean Up Program and other DEC initiatives is promising to expedite redevelopment. The five strategic sites are:

- 1 KOSCO Assemblage
- **2** The Landing
- 3 Millens and Son Site
- 4 Block Park / Island Dock
- 5 Noah Hotel Site



FIGURE 04.81 Strategic Sites Location Maps

KOSCO ASSEMBLAGE

This site is a 4.14 acre facility on the south side of East Strand, adjacent to the former L&M Auto Parts site. The site was acquired by Historic Kingston Waterfront, KOSCO, LLC in September 2007. The site is currently rented to local artisans and is rented by the NY State Police, Ulster County Sheriff's Department and DEC to dock emergency response vessels. It was the location of the Kingston Oil Supply Company (KOSCO) Service Department. Until seven years ago, the site was the base for 25

technicians for residential and commercial heating customers and marine fueling terminal. Tanks were removed from the site seven years ago. However, there is no evidence of any spills or leakage from the KOSCO tanks. The site is surrounded by a chain link fence and includes four one-story structures. Historically, the site was used for rail operations.



FIGURE 04.83 KOSCO Assemblage existing condition street view



OPPORTUNITIES

- 1. Access to Greenline
- 2. Road frontage
- 3. Long expanse of uninterrupted deep waterfront (900')
- 4. 10' setback required (unless structure is a marina)
- 5. Citibus access
- 6. Steep slope / maintained views
- Commercial zone
 Views

Capable of remediation

Substantial brownfield tax credits

- 9. Required easement for public access on Greenline
- 10. FEMA Flood zone
- 11. Edge: Timber Bulkhead Fair to Poor condition
- 12. Existing structures

FIGURE 04.82 Kosco Assemblage Opportunities and Constraints

THE LANDING

Kingston Landing is located southeast of the intersection of North Street and East Strand, bordered on the north and the west by B. Millens Recycling operations. This 3.77 acre site is vacant land and marshland located at the mouth of the Rondout Creek. It offers unobstructed views of the Hudson River, Kingston Point Lighthouse and surrounding environs. The property was acquired by Historic Kingston Waterfront, Kingston Landing, LLC in April 2005. The site is reclaimed land. During the 1970's a portion of the eastern area was reclaimed using fill material. About half



FIGURE 04.85 The Landing existing condition street view

of the parcel is submerged at high tide. The western half of the property is marshland. There is a boat launch ramp to the Rondout Creek at the southwest corner of the property. The property has 215 feet of frontage along the east side of North Street. There are currently no on-site structures. The site was formerly used as a marina from the early 1970's to the 1980's. The most appropriate reuse for this property is likely to be a destination project that will take advantage of its prominent location, such as a high-end restaurant.



OPPORTUNITIES

- 1. Possible kayak launch (as identified in BOA step 2)
- 2. Greenline frontage
- 3. 10' setback required (unless structure is a marina)
- 4. Road frontage
- 5. About 50% of assemblage is water
- 6. Views
 - Capable of remediation

- 7. FEMA Flood zone
- 8. Edge: Timber Bulkhead Fair to Poor condition
- 9. Edge: Mixed Stabilization Fair to Poor condition
- 10. Prior usage

FIGURE 04.84 The Landing Opportunities and Constraints

MILLENS & SONS

B. Millens & Son Scrap Metal Recycling operates its vehicle and equipment maintenance facility on the north side of East Strand Street. The site includes a small brick and concrete block structure built at the front of the lot that is used for vehicle and equipment maintenance and storage. A gravel area to the east of this building is used to store trailers, miscellaneous heavy equipment and scrap metal in roll-off containers. Historically the site has been used for cement works, storage and vehicle maintenance. The Landing and KOSCO sites assemblages are the critical areas for redevelopment. The KOSCO site is strategically located adjacent to the

Millens Property and the Central Hudson Former Coal Gas Facility, which is also under consent order. The Millens Site has been recently added to the Registry of Inactive Hazardous Waste Disposal Sites in the second half of 2008 and there is a consent order for that site as well.





FIGURE 04.87 Millens & Sons existing condition street view

OPPORTUNITIES

- 1. Kingston Point Park Access
- 2. Greenline access
- 3. Steep slope / maintained views
- 4. RRR one family residential zone
- 5. Edge: Natural shoreline
- 6. No existing structures

- 7. Minimal road frontage
- 8. FEMA Flood zone
- 9. Views
- 10. Entire site has high risk of contamination by petrol and heavy metals

BLOCK PARK / ISLAND DOCK

Block Park is a 6.5 acre site located between Abeel and Ravine Streets and the inner channel of Rondout Creek from Island Dock. Block Park is currently a City operated public space and includes a softball diamond, basketball courts, seasonal bathrooms, handball courts, a pavilion, picnic area, and a playground. The park floods during heavy rain both from the creek and from upland water flowing down the hill to the north. The water pools in the south west corner of the park. Also included in the strategic site is the privately owned Hideaway Marina.

Island Dock is a 20 acre (including water) manmade island that is currently privately owned. Historically, it was a transfer point for coal from small boats carrying it on the Rondout to large boats that would carry it on the Hudson to New York City. The island is currently covered with trees and contains a private dirt road for vehicular access. The existing culvert between the island and the mainland does not allow for an ideal level of flushing between the inner channel and Rondout Creek.



FIGURE 04.89 Block Park existing condition street view



OPPORTUNITIES

- 1. Limited existing development
- 2. Sheltered waterway
- 3. Road frontage
- 4. Connection to Greenline
- 5. Views
- Island Dock Brownfields Program Capable of remediation

- 6. FEMA flood zone
- 7. Entire site has low to moderate risk of contamination by petrol, heavy metals. and organic pollutants
- 8. Edge: Timber Bulkhead Fair to Poor condition
- 9. Edge: Mixed Stabilization Fair to Poor condition
- 10. Existing use: Block Park is a public recreation space

FIGURE 04.88 Block Park / Island Dock Opportunities and Constraints

NOAH HOTEL SITE

The Noah Hotel site is approximately 1.75 acres and it includes a group of vacant and under utilized properties previously studied and cleared for redevelopment. It is located at the intersection of Abeel Street and Hone Street. The site is a hill site and therefore offers frontage both on Abeel Street and W. Strand Street/Dock Street. The site in the past has been identified as a potential hotel site and is where the site gets its informal nickname, the Noah Hotel Site. There are sweeping views of Rondout Creek from the upper level and it offers proximity to Island Dock and a potential to connect at the higher elevation of Abeel Street without affecting boating.

The site is strategically located at the mid-point between Block Park and Broadway with significant proximity to recreational boat activity. Directly across of W. Strand Street/Dock Street is the pedestrian promenade that runs the majority of the waterfront. There is no sidewalk on parcel side of the street on W. Strand/Dock Street.



FIGURE 04.91 Noah Hotel Site existing condition street view

2

FIGURE 04.90 Noah Hotel Site Cpportunities and Constraints

OPPORTUNITIES

- 1. High elevation
- 2. Sheltered waterway and substantial boating community
- 3. Road frontage on two sides
- 4. No existing development
- 5. Connection to Greenline
- 6. Views

- 7. Difficult grade at site may affect construction costs.
- 8. Currently little or no pedestrian activity at either lower waterfront level or at the upper residential level.

CASE STUDIES

We have set out to compare similar Hudson Valley Waterfronts to establish ideas, challenge common approaches and understand regional assets. Through a comparative analysis we can evaluate the merits of Kingston's neighbors and help unlock the potential of the Rondout.

We have selected a variety of Hudson Valley Waterfronts known for a variety of reasons. They are Beacon, Newburgh, Saugerties and Hudson. Each is evaluated at the same scale and set of lenses to identify how opportunities are captured and challenges met. Kingston has the potential to recreate and brand an entirely new destination waterfront and leverage lessons learned from the Region.



FIGURE 04.92 A view of the Hudson River



KINGSTON, NY



By establishing a baseline for scale and community make up, each area can be evaluated against similar metrics in Kingston. While the City of Kingston is larger than the areas being studied it has a very similar waterfront settings and set of challenges and opportunities. Some of the metrics that were looked at were demographics, household median income levels, age distribution and race distribution. Each area provides a unique perspective on potential things to do and not do in Kingston.

BEACON, NY



NEWBURGH, NY



HUDSON, NY



SAUGERTIES, NY





MEDIAN INCOME LEVELS







FIGURE 04.93 Case Study Site Demographics based on 2010 census

HUDSON, NEW YORK

Hudson was the first chartered city in the United States. It was first settled by the Dutch in the mid-17th century and called Claverack Landing. In 1783, the Proprietors, a group of predominantly Quaker whalers and merchants came, seeking refuge from the Revolutionary War torn east coast and purchased the land from the Dutch. The Proprietors created a city plan consisting of a large grid, with a main street running west to east and lots measuring 50 by 120 feet, with 20 foot lanes behind. That grid largely exists to this day, with Warren Street at its center.

Early Hudson flourished thanks to the whaling, sealing, fishing and shipbuilding industries. While it was never a premier whaling locale, Hudson's early prosperity was a direct result of an industry with its origins in and around its deepwater port, and it remained a shipping and manufacturing center well into the 20th century. Although the city declined during the 1960s and 1970s, many of its abandoned and derelict buildings were reclaimed in the 1980s, and its former glory slowly began to reemerge. Today, Hudson has transformed itself into a vital arts and antiques center.

The mile-long business district – centered on Warren Street – boasts dozens of firsttier antique and home furnishing shops, along with an eclectic mix of art galleries, restaurants and performance spaces, housed in buildings that constitute "one of the richest dictionaries of architectural history in New York State."

Source: gotohudson.net

DRIVE TIMES

TO NEW YORK	TO KINGSTON
2h 20m driving	40m driving
2h 30m Amtrak/Metro-North	2h 45m biking



FIGURE 04.95 Hudson Opera House



FIGURE 04.94 Olana State Historic Site



FIGURE 04.96 Case Study: Hudson

SAUGERTIES, NEW YORK

Settled in its early days by the Dutch, the Town of Saugerties sits nestled between the base of the Catskill Mountains and the Hudson River. Saugerties experienced minimal growth after the mid-1600s until two major events occurred. One was the coming in 1710 of the Palatines, a group of refugees who had fled the Rhine Valley in Germany to settle in West Camp, a hamlet of this community. The second important event was the arrival of industrialist Henry Barclay in 1825. Barclay immediately secured title to land on both sides of the Esopus Creek where he built his dam and used the water flow to generate power needed to run his mills and build an industrial community.

Irish, Italians, Germans and scores of others arrived to work in these mills. It was discovered also that the quarries here held some of the most beautiful bluestone in the world, bringing even more workers.

Today, the Town of Saugerties, which just celebrated its 200th anniversary of incorporation, is still growing and thriving. Industry still has a home here but the community has evolved into so much more. The community has become an important tourist location energized by the artists, environmentalists, historians, antiquarians, restauranteurs and sports enthusiasts who reside here today.

Source: discoversaugerties.com

DRIVE TIMES

TO NEW YORK	TO KINGSTON
2h driving	25m driving
2h 40m bus (Adirondack Trailways)	1h 10m biking
	15m bus (Adirondack Trailways)



FIGURE 04.97 Saugerties Lighthouse



FIGURE 04.98 Diamond Mills



FIGURE 04.99 Case Study: Saugerties

NEWBURGH, NEW YORK

The City of Newburgh boasts the second largest historic district in New York State. An easy walking tour of the East End will encounter architectural gems from the 1800s, including the Greek Revival Dutch Reformed Church on Grand Street, a National Historic Landmark. On Liberty Street, Washington's Headquarters, the nation's first publicly owned historic site, is bordered by quaint shops and cafes. Hudson River vistas can be seen from the Headquarters' spacious grounds, as well as along the City's main thoroughfare, Rev. Dr. Martin Luther King Boulevard, and from the "Bluff" in Washington Heights.

A tour of Broadway and adjacent neighborhoods will provide not only a taste of Newburgh, but of cuisines from around the world. The City's diversity is one of our greatest assets, and it is commemorated throughout the year with festivals, parades and celebrations.

Newburgh is an "artist-friendly" City, and has a diverse population of talented and creative people, who call the City of Newburgh home. Events like "Last Saturday" and "Open Studios," draw visitors from all over the mid-Hudson.

Source: cityofnewburgh-ny.gov

DRIVE TIMES

TO NEW YORK	TO KINGSTON
1 h 30m driving	45m driving
2 h 30m ferry>train	3 h 15m bicycling
	55m bus (Adirondack Trailways)





FIGURE 04.101 MotorcyclepediaMuseum



FIGURE 04.100 Storm King Sculpture Center



FIGURE 04.103 Case Study: Newburgh

BEACON, NEW YORK

Beacon is a city located in Dutchess County, New York, United States. Beacon is part of the Poughkeepsie–Newburgh–Middletown, New York Metropolitan Statistical Area as well as the larger New York–Newark–Bridgeport, New York–New Jersey– Connecticut–Pennsylvania Combined Statistical Area. It was named to commemorate the historic beacon fires that blazed forth from the summit of the Fishkill Mountains to alert the Continental Army about British troop movements.

The area occupied as Beacon was originally settled as the villages of Matteawan and Fishkill Landing in 1709, which were among the first communities in the county. Beacon is located in the southwest corner of Dutchess County in the Mid-Hudson Region, approximately 90 miles (140 km) south of Albany, New York, and approximately 65 miles (105 km) north of New York City.



FIGURE 04.106 Southern Dutchess Country Club



TO NEW YORK	TO KINGSTON
1h 30m driving	45m driving
1h 45m Metro-North	3h 30m biking



FIGURE 04.105 Hudson Beach Glass



FIGURE 04.104 DIA: Beacon



FIGURE 04.107 Case Study: Beacon

05 DESIGN FRAMEWORK

In order to engage stakeholders and set the tone for future design and implementation thinking, four distinct frameworks were developed as guiding principles. These frameworks were intended to be open-ended to evoke excitement, develop ideas, raise concerns and foster momentum towards creating a one of a kind revitalized and realized Kingston Waterfront. Achieving buy-in on these larger framework helps focus the ultimate state of the waterfront and allows the vision to always be vetted against a set of priorities and community driven decisions.

The four focused frameworks are:

- Cohesive
- Connected
- Vibrant
- Achievable

In order to solicit feedback from the steering committee on the frameworks a workshop was held on October 28th, 2014. A table was set up for each of the frameworks with a facilitator from the consulting team leading the conversation and documentation. After 25 minutes of passionate discussion steering committee members were asked to rotate onto the next topic. This repeated four times until each stakeholder had an opportunity to participate at each of the four frameworks. Each facilitator then reported out to the group on major topics and repeating themes. This feedback was presented back to the public in January and has been an integral part of the Vision Planning.













COHESIVE

Creating a 2 mile holistic, end to end waterfront that provides a variety of unique moments that establish a world class waterfront destination. Make it a year round destination with opportunities for pause along the way. Use major open space as bookends.

KEY IDEAS FOR A REVITALIZED HUDSON RIVERPORT:

- Interstitial space that weaves the waterfront together
- Overall brand of the waterfront
- Park bookends
- Special nodes and opportunities along the way













LANDSCAPE

Martin

4

05 DESIGN FRAMEWORK

CONNECTED

Creating a waterfront for all by connecting upland, at the waterfront and to the water through physical, visual and social links. Connect to people, to the neighborhoods, to the water, to the history and to nature that make Kingston so special.

KEY IDEAS FOR A REVITALIZED HUDSON RIVERPORT:

- Where are the best opportunities to connect upland
- Critical habitat and ecological connections
- Opportunities to get in the water
- Leverage tourism and regional assets and deficiencies
- Partnership opportunities
- Larger cultural and recreation systems to connect to











COMMUNITY + HEART

PERKINS + WILL I SCAPE I NAUTILUS INTERNATION



23

05 DESIGN FRAMEWORK

F.

VIBRANT

Creating a sustainable waterfront development that activates the entire area through exciting and innovative land use, programming, branding, character and building typologies.

KEY IDEAS FOR A REVITALIZED HUDSON RIVERPORT:

- What types of uses are exciting and appropriate?
- What types of seasonal uses and programs would work?
- What do you want your waterfront to look like?
- What is the right height and density at the water?
- Who are the potential partners and institutional anchors?













DAY + NIGHT ACTIVITY

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05 DESIGN FRAMEWORK

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ACHIEVABLE

Identifying the opportunities and constraints for implementation of an exciting waterfront vision. Explore the projects that will catalyze revitalization and develop the funding and management to achieve it.

KEY IDEAS FOR A REVITALIZED HUDSON RIVERPORT:

- Where are the shovel ready projects?
- Resiliency and Sustainability as the new standard
- · Site remediation as a way to activate the site
- Potential catalyst projects















PERKINS + WILL | SCAPE | NAUTILUS INTERNATIONAL | JLL | AECOM | WATTS



Figure 05.108 represents a summary of the feedback collected after the Steering Committee Framework Workshop. An aspirational plan for creating a vibrant and cohesive Kingston Waterfront that celebrates history and heritage and that establishes a sustainable and sensitive destination.

FIGURE 05.108 Framework Workshop Summary



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CITY OF KINGSTON BROWNFIELD OPPORTUNITY AREA STEP 3

Final Implementation Plan | Volume II December 2015

PROJECT TEAM New York Department of State City of Kingston

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06 DESIGN STRATEGY

The purpose of this section is to outline the conceptual revitalization plan for the waterfront that builds off the established framework and feedback received from the Steering Committee and community. The Hudson Riverport at Kingston Vision Plan is an aspirational plan for creating a vibrant and cohesive Kingston Waterfront that celebrates history and heritage and that establishes a sustainable and sensitive destination. The vision is not prescriptive, instead it sets out to excite and establish a structure to achieve a long-term implementation that embodies the goals and priorities of the community and to truly make Kingston a great waterfront for all.

The plan focuses on parcels inside the BOA boundary however also considers the surrounding context to insure connectivity and sensitivity. Key areas such as Broadway were further explored due to the direct influence on the rest of the waterfront.

The overall methodology for arriving at a plan was to create a conceptual vision for a cohesive long-term waterfront that balanced the framework with larger organizing strategies such as resiliency, transportation, landscape, recreation and market demand. Then individual parcels were further developed to achieve the overarching vision. A phasing strategy was devised to interject enough program to create critical mass and not exceed market absorption. Catalytic projects are identified at each phase to spark revitalization.

OVERALL WATERFRONT VISION

The Kingston Waterfront has tremendous existing assets- the waterfront and boating, maritime history, culture, heritage, industrial building stock, natural resources and a mixed use community and a great location at the mouth of the Hudson River. The vision for the waterfront sets out to create strategic developments that will draw people along the full length of waterfront and create a world-class, vibrant mixed-use waterfront that mitigates the challenges of both contamination and flooding.

A key component of the Hudson Riverport at Kingston is to create a place for existing Rondout community members and regional visitors to enjoy the waterfront and interact with one another and these tremendous natural resources. Thus, the waterfront has a diverse range of edges, with some areas providing amenities for the existing community and others that address a regional scale. The shift from local to regional focus is reflected by the shifting edge condition along the waterfront. Harder edges such as boardwalks and bulkheads support existing maritime industries and protect the historic fabric, while softer and naturalized edge provide habitat and increase resiliency along the Hudson River corridor.

The following topics outline the overall vision through specific lenses:

- Arts, Culture & Heritage
- Health, Wellness & Recreation
- Green Infrastructure
- Transportation
- Community Resiliency

ARTS, CULTURE & HERITAGE

The Rondout has a tremendous maritime history that is about the water, related industries and people. The plan attempts to highlight these tremendous opportunities and provide a platform to attract new and exciting programs that cater to the income level and diverse age of the population:

- 1 Leverage the river and the maritime industry (Historic WW II PT Boats and Tugboats)
- 2 Utilize historic building stock and cultural assets (Trolley Museum, Historic Dayliner)
- 3 Link to existing historic neighborhoods
- **4** Create opportunities for waterfront education (Clearwater, Maritime Museum, Boat Building School)
- 5 Provide opportunities for artist studios, lofts, and gallery spaces





HEALTH, WELLNESS & RECREATION

A focus on health, wellness, and recreation supports a more resilient community. It also has the potential to affect tourism and broader investment in the waterfront now and in the future. Additionally, as a portion of the site is a food desert, the neighborhood can greatly benefit from interventions that provide access to healthy foods.

- 1 Create a waterfront promenade with a 2-mile walking and jogging course
- 2 Provide access to healthy and affordable food through a neighborhood grocery store
- **3** Incorporate the Greenline pedestrial and bicycle trail to encourage exercise; link to larger regional biking system
- 4 Create hiking trails on Island Dock
- **5** Reimagine Kingston Point Park as a recreation destination with adventure playgrounds, improved BMX course and beach, and exercise trails



GREEN INFRASTRUCTURE

As the plan moves from west to east the vision for the waterfront transitions from a local community based destination to a softer more natural edge that reflects the relationship to the Hudson River and the Region. This is also reflected on the waterside as boat docking transitions into resiliency focused soft edges and habitat opportunities.

Green infrastructure tactics are reflected in the Landscape, Habitat, and Resiliency Strategy portions of this section.

- 1 Use natural systems to reduce flood risk and erosion- including green buffers, bioswales, berming and elevated right-of-ways
- 2 Reduce stormwater, upland flooding, and combined sewer overflow
- 3 Protect and increase habitat on land and in water

TRANSPORTATION

The vision for the Hudson Riverport at Kingston is to be a walkable community with multimodal options. With increased waterfront activity, a district approach to parking multimodal streets are critical to the success of the area. These strategies are incorporated into larger landscape and resiliency strategies that address flooding.

- **1** Re-envisioned East Strand as a complete street that creates a safe pedestrian focused road for cars, people, bikes, and trolley
- 2 Incorporate the Greenline pedestrian and bicycle trail throughout the waterfront
- 3 Provide access for recreational boaters and dayliners
- 4 Expand the Trolley network to provide non-vehicular transportation options for elderly





COMMUNITY RESILIENCY

The plan sets out to not only redevelop the waterfront and encourage revitalization but also to empower the community. The plan sets out to protect the community during extreme weather events and addresses chronic stressors of society. Various social resource gaps have been identified that the plan sets out to address:

- 1 Access to healthy affordable food
- 2 Social equality, a waterfront destination for all
- 3 Ecological diversity and access to nature
- 4 Places to gather and interact
- 5 Stable housing types
- 6 A mix of uses
- 7 Quality Jobs
- 8 Connections to culture and heritage
- **9** Recreational opportunities









FIGURE 06.1 The Hudson Riverport Vision Plan through various lenses

8



The overall vision for the Hudson Riverport at Kingston is for a resilient, balanced and achievable waterfront district that unlocks the full potential of the neighborhood and excites the community.

FIGURE 06.2 Overall Waterfront Vision



ILLUSTRATIVE PLAN

While it is important to define the incremental steps necessary to redevelop the waterfront it is also critical to define a larger cohesive vision plan. This long-term vision guides decisions and allows a market to be established to absorb some of the more aspirational developments. The long-term vision of the Hudson Riverport at Kingston is laid out in three distinct zones as depicted in Figure 06.4 - Figure 06.7.

The Illustrative Plan here is a conceptual representation of the ultimate build-out of a vibrant mixed-use Hudson Riverport at Kingston. Buildings and landscape strategies are a depiction of what could be achieved through proposed land use and recommendations outlined in the BOA Step 3.



FIGURE 06.3 Hudson Riverport Vision Plan





FIGURE 06.4 Zone 1 Overview Plan



ZONE 1: RESILIENT RONDOUT

The southwestern most zone stretches from Block Park until the Trolley Museum and waste water treatment plant. The focus of the Resilient Rondout zone is to build off of existing assets and strengthen the core of the waterfront zone. The vision is to create a double-sided walkable and active Broadway from Spring Street to the waterfront. Currently the west side of the street offers a relatively consistent pedestrian experience while the east side lacks a cohesive edge leaving people little reason to walk the sidewalks. Through incentivizing existing ground floor owners to convert housing to retail, walking is encouraged and the overall character of the street is strengthened.

Likewise key destinations at strategic sites, such as at the corner of Spring Street need to create iconic retail stores that set the tone for the new east side of the street. Another key destination is at the end of Broadway at Rondout Landing, is an existing surface parking lot that is the terminus of this main corridor leading to the waterfront. While parking is a critical issue the most important street deserves a much more important destination that creates excitement and orientates the distribution of people to other waterfront destinations—this could be an opportunity for small retail, cultural facilities or artist space. Broadway also needs to be opened up to allow more frequent pedestrian crossing. Building additional crosswalks and breaking up the planting on the medians will encourage a cross flow of pedestrians which will help to establish a double-sided Broadway.

There is an opportunity to provide a variety of smaller flexible spaces within historic buildings to attract new start-ups and allow businesses to grow as the Rondout grows. One example would be creating a culture and food incubator at the Cornell Building that celebrates new and established uptown and regional partners and builds on a thriving theme of food in the area.

This zone also focuses on water by extending the opportunities to access and orientate to the waterfront. Boat docking and boat-related business are prioritized in order to maintain a working waterfront that is welcome to all. Mixed use development above the ground floor is used to create a vibrant 24-hour community.

Currently Block Park sits as an underutilized public amenity that occasionally floods and provides no access to the waterfront. Meanwhile Island Dock is a private parcel that currently has one causeway for access and requires creative solutions to develop due to flooding issues and limited infrastructure. The BOA Plan proposes that Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) might be purchased by the City of Kingston, possibly with the participation and/or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition.

There is a potential to raise Island Dock with cheap, barge accessible fill from NYC.

Building heights in this zone vary and are measured relative to the water level. From Block Park to the hotel site, heights are 4-6 floors. Along Dock Street, Broadway, and Rondout Landing, heights are 2-5 floors.

ZONE 1: RESILIENT RONDOUT

1. WATERFRONT SITE

A new hotel provides a unique opportunity to cater to recreational boaters and Hudson Valley Tourists. It can be accessed both at the upper level of Abeel Street and the lower level at W Strand Street.

2. WEST STRAND

West Strand is re-envisioned as a complete street that balances access to cars, pedestrians, bicyclists, and trolley cars. Street-level retail activates the fulllength of W Strand Street.

3. ACCESS TO ISLAND DOCK

A pedestrian link connects Island Dock to Hone Street on the mainland. Elevated to the level of the hotel, the link also allows for tall boats to pass underneath.



FIGURE 06.5 Resilient Rondout Rendering

4. LANDSCAPE

Island Dock can be transformed into a forested park populated with trails and selective clearings to create a network of outdoor arts installations and recreational walking loops.

5. HABITAT

An environmentally sensitive approach to the creation and location of trails and gathering areas balances habitat needs with park access and facilities.

6. ARTS & CULTURE

Outdoor gathering areas throughout Island Dock Park provide an opportunity for local artists to showcase their work, and through the incorporation of educational markers, tell the story of the Island's history.





FIGURE 06.6 Zone 2 Overview Plan

ZONE 2: ADAPTIVE EDGE

The Adaptive Edge zone begins at the eastern edge of the waste water treatment plant and stretches to North Street. The Adaptive Edge zone addresses the serious flooding and contamination in this area and uses the idea of resiliency as part of the character and identity.

Development in this zone includes a mixture of retail and residential uses. The zone also takes advantage of its proximity to Hasbrouck Park. While Hasbrouck is at a significantly higher elevation, the parcel to the north of East Strand and to the west of Tompkins Street offers an opportunity to ascend the hill and connect with a wider trail network that leads to the park. Development of this trail connection can include a community use building and a district parking structure embedded into the hill.

Building heights in the zone are 1-4 floors and are measured relative to the water level.



FIGURE 06.7 Zone 3 Overview Plan

ZONE 3: ECO ZONE

The Eco Zone stretches from the southern end of North Street out to the Kingston Point lighthouse and north to include Kingston Point Park. The Eco Zone promotes wildlife habitats in and around the water. The existing marshes are restored and a simple boardwalk allows for public access. This zone also focuses on establishing Kingston Point Park as a regional destination through an eco-hotel along North Street, and event pavilion in the park, a restored day-liner terminal with trolley access, and regional-scale park amenities.

Building heights in this zone are 1-2 floors and are measured relative to the water level.

The HeritagEnergy Terminal at Kingston Point remains as a critical Hudson River infrastructure.

ZONE 2: ADAPTIVE EDGE

1. DEVELOPMENT SITES

A mix of retail and residential uses activate the waterfront and buildings of 1-4 stories take advantage of expansive water and park views.

2. RESPONDING TO RISING WATERS

Parcels are reshaped and elevated to raise development out the floodplain. Water inlets and bioswales further protect development from rising water levels and upland flooding issues.

3. HARDENED EDGES

Hardened edges are reinforced for boat-related industrial and commercial access, allowing for sheltered kayak and row boat launches.



FIGURE 06.8 Adaptive Edge rendering

4. SOFTENED EDGES

Naturalized edges create fish spawning habitat, green wetland buffers to reduce wave action and storm surge, while providing recreational access and open space at the water's edge.

5. VIEWS

The waterfront belongs to everyone, including those in upland Kingston. As such, key street and visual corridors leading to the waterfront are been maintained and enhanced.

6. MULTIMODAL

The existing trolley line is preserved and a new parallel pedestrian path extends the Greenline trail for pedestrians and bicyclists.



ZONE 3: ECO ZONE

1. WETLAND BOARDWALKS

A network of environmentally sensitive and low-impact boardwalks provide access to wetlands and education amenities throughout the park.

2. EVENT PAVILION

A multi-purpose pavilion in Kingston Point Park offers a regional destination for large events, weddings, and informal gatherings.

3. BIRD BLINDS & VIEWING PLATFORMS

Bird blinds and overlook platforms provide wildlife viewing areas and intimate places to engage the expansive Hudson River and landscape views.



FIGURE 06.9 Eco Zone rendering

4. HISTORIC DAY-LINER

A restored day-liner terminal connects locals, event groups, and regional visitors to the Hudson Riverport via the restored trolley line.

5. LEARNING LANDSCAPE

Ecological and resilient features of the area are highlighted through a network of educational signage.

6. WETLANDS & HABITATS

Existing and restored wetlands are a critical mitigating element to ensure that the existing habitat thrives despite shifting water levels.



PHASING STRATEGY

The History of the Rondout is rooted in its industrial past and Hudson Valley setting. The Lower Rondout was once the transfer point for coal that was brought via the Delaware and Hudson Canal from northeastern Pennsylvania. Coal was moved from canal barges to Hudson River ships at Island Dock and sailed down the Hudson to New York City. This led to an industrial boomtown being established along the waterfront. After advances in railroad made the canal transfer obsolete development around the Rondout stalled. The waterfront remained primarily an industrial and working waterfront which left many of the sites contaminated. With a recent resurgence in Kingston's commitment to revitalize its waterfront this is an exciting time to reinvest in the waterfront.

The proposed phasing for the Hudson Riverport at Kingston Vision Plan is a balance of creating a incremental critical mass without exceeding market absorption. It leverages the fact that as the waterfront is transformed into an exciting destination the demand will increase across sectors. In general the strategy is to focus around Broadway and existing assets in the near term. Then create distinct destination that draw people the length of the waterfront and infill over time. The proposed phasing timeframe is as follows:

- Phase 0 (0-2 years) Quick Wins
- Phase 1 (2-5 years) Center and Invest
- Phase 2 (5-10 years) Connect
- Phase 3 (10-20 years) Grow the Rondout
- Phase 4 (20+ years) Long-term Development

CURRENT STATE OF KINGSTON WATERFRONT

Currently the Kingston Waterfront is focused around Broadway with a successful concentration of restaurants, small shops, cultural destinations and residential units. There is a tremendous amount of recreation and charter boat activity. The state of the waterfront and activity declines quickly once removed from the Broadway area, especially as you move east toward the Hudson. Given the industrial past of the waterfront many sites may have contamination, but capable of remediation. Even though there has been some efforts to create consistent paths along the water and out to Kingston Point currently there is little to draw people out. Currently the waterfront is only active during the warmer months with little ways to engage the waterfront in the winter. While there have been many successful strategies put into place by current businesses, such as the Kingston Night Market, there are still significant opportunities to activate and revitalize the entirety of the waterfront.



FIGURE 06.10 The Kingston Night Market is an existing summer event that draws residents of the city and region to the waterfront

PHASE 0 (0-2 YEARS) - QUICK WINS

In order to gain momentum and raise awareness it is important to have an identity that visitors can connect with to show physical improvements and actions associated with the BOA plan. There are tremendous efforts already happening around the waterfront that should be continued to leverage with new quick wins identified. Some potential early steps that build upon existing resources such as historic buildings stock, small scale businesses, artists' migration to the city, and local food production could include:

- Pop-up park; Develop identity and early brand strategy
- Set up a pop-up park[s] that echoes the longer term opportunities
- Organize food-focused events; that highlight the Hudson Valley resources
- Invest in wayfinding and signage, that reinforce the overall identity and encourage movement
- Encourage art, antiques and other cultural events that build on the energy of existing activities







FIGURE 06.12 Examples of Quick Wins







FIGURE 06.11 Hudson Riverport Now



PHASE 1 (2-5 YEARS) - CENTER AND INVEST

The goal of this phase is to set the regulatory framework to incentivize revitalization. At this time it would be important to invest in critical infrastructure to attract new investment such as public street improvements (complete streets), the Kingston Greenline, accessibility improvements and public parking facilities. This will begin to develop the brand of the Rondout as well as to implement the design guidelines and the local management structure. Development is focused around ready sites and existing building stock that can be retrofitted around Broadway and downtown. Suggested steps are:

- Complete a comprehensive Brand Strategy to begin to position Kingston with a broader audience.
- Finish community developments at Irish Cultural Center and Maritime Museum Boat Building School.
- Invest in Critical Infrastructure to attract new investment.

Commercial	5,000 sf	
Retail	5,000 sf	
Hotel	0 sf	
Civic	20,000 sf	Irish Community Center
Residential –	10,500 sf	Planned Residential Conversion of Church
	9 units	1200 sf per unit
Surface Parking	15 spaces	
Structured Parking	0 spaces	assume 325 sf per space
APPROXIMATE TOTAL SF	40,500 sf	

FIGURE 06.13 Phase 1 Development Table



FIGURE 06.15 Current ongoing projects which are a part of phase 1 development





PHASE 2 (5-10 YEARS) - CONNECT

Create catalytic projects that develop the market and draw local and regional visitors to waterfront. By establishing new unique destinations people will be motivated to engage the waterfront beyond Broadway. Suggested steps are:

- Build up downtown target vacant lots and ground floor at Broadway •
- Develop eco-hotel destination at the Millens & Sons Strategic Site
- Develop small scale grocer
- Waterfront connections, bulkhead enhancements
- Develop a complete street along East Strand Street; improve multimodal connections; focus on the end to end connections
- Complete Greenline construction
- Island Dock Park
- Improve Regional Park/ Destination Playgrounds

Also include 20 acres of park development at Island Dock- limited design, mowing paths, incorporating art, small infrastructure enhancements, amphitheater.

Commercial	0 sf	
Retail	131,500 sf	includes grocery store
Hotel	32,000 sf	40-key eco-hotel
Civic	0 sf	
Residential	12,000 sf	1200 of portunit
	10 units	
Surface Parking	160 spaces	
Structured Parking	200 spaces	assume 325 sf per space
APPROXIMATE TOTAL SF	240,500 sf	

FIGURE 06.16 Phase 2 Development Table



FIGURE 06.17 Phase 2 Development Plan



PHASE 3 (10-20 YEARS) - GROW THE RONDOUT

Capitalize on new demand and synergies to develop new complete neighborhoods at the waterfront. This phase in fills the space between strategic catalyst sites. Suggested steps are:

- Cut Fill Remediation and Adaptive Edge Development
- Creation of a Food/Culture Hub at the Cornell Building and development surrounding
- 150 Key Hotel at the Noah Hotel strategic site

Commercial	235,000 sf
Retail	110,500 sf
Hotel	120,000 of 150 key hotel, Assumes 850sf per key to
	capture common space
Civic	91,000 sf
Residential	103,500 sf
	86 units
Surface Parking	81 spaces
Structured Parking	300 space assume 325 sf per space
APPROXIMATE TOTAL SF	757,500 sf

FIGURE 06.18 Phase 3 Development Table



FIGURE 06.19 Phase 3 Development Plan



PHASE 4 (20+ YEARS) - LONG-TERM DEVELOPMENT

The final phase allows a large scale anchor development to capitalize on the success of the established waterfront. The size and flexibility of the site all the development to respond to market trends. While it is primarily slated for residential the types of units and the mix can change depending on relevant trends at the time of development. The suggested steps are:

- Western Anchor Development
- Promenade/trolley line extension

121,000 sf	
31,000 sf	
0 sf	
0 sf	
385000 sf	1000 of nor whit
321 units	1200 SI per unit
45 spaces	
250 spaces	assume 325 sf per space
618,250 sf	
	121,000 sf 31,000 sf 0 sf 385000 sf 321 units 45 spaces 250 spaces 618,250 sf

FIGURE 06.20 Phase 4 Development Table



FIGURE 06.21 Phase 4 Development Plan



LAND USE STRATEGIES

LAND USE CATEGORIES

Residential- Low to medium density units that provide a range of user types such as, market rate, affordable units, senior housing, artist lofts and live-work.

Mixed-Use Commercial/Residential-This use is typically multifamily residential buildings with stores and/or neighborhood services on the ground floor. Mixed-use buildings with both offices and residences are possible, however no commercial space can be on a higher floor than a residential unit.

Commercial- Job generating spaces that are typically cleaner than industrial space. These spaces are commonly office space, retail and flexible desk spaces.

Public Services - This includes all public utilities.

Community - This includes schools, churches, museums, etc.

Recreation / Entertainment - Spaces created for community gatherings. Separate from parks and open space, these spaces may have infrastructure and utilities included.

Industrial- Reserved for manufacturing, transportation, utilities and storage uses.

Park/Open Space- Open space is any open piece of land that is under developed and is accessible to the public. These spaces are typically seen as assets and opportunities for recreation and access to nature.

The overall Land Use Strategy is to convert underutilized sites, vacant lots and industrial uses with more active uses that create a mixed-use waterfront community for a spectrum of locals and regional visitors. Allowing local scale retail and maker-space at the ground floor with residential units above to attract a diverse day and night population. The strategy transforms the land use focus from more community focused uses at the core near Broadway and transition to a regional focus as you move east towards the Hudson River.

It also realizes that Island Dock as a private parcel for development requires creative solutions. The BOA Plan proposes that Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) might be purchased by the City of Kingston, possibly with the participation and/or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition.

This would result in a +24.8 acre net gain of park land for the City.










PARKING STRATEGIES

Kingston is, and is anticipated to remain a car oriented society. Historically surface parking at individual building sites has been the standard. In order to maximize development opportunity and create a consistent and vibrant public interface it is suggested to establish district parking garages at key development sites. These would be strategically located within a five minute walk from one another and near recommended trolley stops for multi-modal ease. The Greenline and a waterfront promenade facilitate walking between parking lots and waterfront destinations. These municipal district parking garages would be subsidized parking structures and would be incorporated into the private development parcels.



FIGURE 06.24 View Strategies

VIEW STRATEGIES

As access to the waterfront is vital to all users, especially those in upland Kingston, it is critical to maintain connections to the waterfront — both physical connections and visual. Major view corridors along streets have been kept open. Likewise building heights and plantings have been kept lower at the water's edge to maintain views. Where buildings do stretch higher, greater distances are kept between the buildings to maintain connections and provide more breathing room.

LANDSCAPE STRATEGIES

As much of the BOA lies within a dynamic and shifting floodplain, the landscape strategies for the Kingston BOA are deeply integrated with resiliency and habitat strategies, and draw heavily from the recommendations that the city has outlined in the Harbor Management Plan and the Flooding Task Force, among other plans. Overall goals and specific key strategies are outlined below, though many concepts are further discussed in the Habitat and Resiliency sections below.

The goals for the Landscape Strategies are to:

- 1 Create an all-season low-maintenance landscape that creates a unified and historic waterfront.
- 2 Protect and increase habitat on land and in water.
- 3 Create continuous public access with expansive views from the Rondout to the Hudson.
- 4 Create recreational opportunities for all ages that activate the waterfront.
- **5** Harness the power of existing wetland buffers and vegetation, while addressing the increasing risk of flooding and sea level rise along the waterfront through the use of innovative and layered strategies.

ZONE 1: RESILIENT RONDOUT

A raised boardwalk provides continuous pedestrian access along the historic waterfront from the Cornell Building to the bridge entrance to Island Dock. The boardwalk not only provides pedestrian and bike access to the waterfront, but will reduce flooding through its embedded deployable floodwalls (see Resiliency Section for more detail).

East Strand becomes a green multimodal Complete Street to enable safe access for all users, including pedestrians, bicyclists, motorists and trolley. Landscaping creates a vibrant and comfortable walking environment through increased tree planting and pedestrian zones, and uses a system of bio-swales to direct, clean and store storm water.

Island Dock could become a forested arts park, with trails and clearings cut to create a network of outdoor arts installations and recreational walking loops. A future amphitheater on the nose of the island could allow outdoor concerts to be viewed from the TR Gallo Waterfront Park. Additional sports fields are added near the permeable parking hub adjacent to the Island Dock Bridge.





FIGURE 06.25 Landscape Strategies Diagram



COMMUNITY



HARDEN

STRENGTHEN BULKHEADS TO BUILD KINGSTON'S WORKING WATERFRONT



FLIP DEPLOYABLE FLOOD WALLS PROTECT EXISTING BUILDINGS

FIGURE 06.26 Landscape Strategies



ACCESS CREATE ACCESS POINTS FOR COMMUNITY WATERFRONT USE



FLOAT FLOATING OR AQUATIC DEVELOPMENT ADAPTS TO RISING WATERS

ZONE 2: ADAPTIVE EDGE

As part of the cut-and-fill strategy (see section on Cut-Fill Strategy below), the waterfront parcels would be reshaped to align with the street grid, building up developable parcels and creating water inlets to safely adapt to rising Hudson levels. The reshaped shoreline would include a mix of hard and naturalized edges. Hardened edges are reinforced for boat-related industrial and commercial access. Soft, naturalized edges create fish spawning habitat, green wetland buffers to reduce wave action and storm surge, and recreational access points for residents.

Each 'Reef Street' can be programmed differently depending on its context. Inlets with deeper waters and harder edges can accommodate dry docks and boat docking. Shallower inlets provide ideal locations for community kayak launches, fishing piers, and overlook decks.

The Adaptive Edge is connected to the Rondout via the Trolley and Greenline, which run diagonally through the development parcels, providing multi-modal linkage to and from the historic core for residents.

ECOLOGY



LIFT

RAISED TRAIL OR LEVEE REDUCES FLOODING + CREATES VIEWS



RESTORE

WETLAND RESTORATION CREATES HABITAT + REDUCES STORM SURGE IMPACT



MOUND CUT + FILL CREATES HIGHER GROUND FOR DEVELOPMENT AND RESTORES SHORELINE FOR HABITAT

STILT CONSTRUCTION ON PIERS REDUCES IMPACT ON ECOSYSTEM + REMAINS FLEXIBLE TO RISING WATERS

ZONE 3: ECO ZONE

As the ecological assets are the key feature of this zone, the Landscape Strategies here are focused primarily on protecting the existing wetlands, and creating Green Buffer zone for migration with SLR and future flooding scenarios.

The ecological benefits of this area would be highlighted through the creation of a teachable landscape. A learning boardwalk provides access to the wetland areas, and education signage illustrates their important role in resiliency and ecology. Bird blinds and overlook platforms provide wildlife viewing areas, as well as places to take in the expansive Hudson views. An elevated walkway would also connect pedestrians to the Kingston Lighthouse, providing waterfront access to an area of the river that has long been inaccessible.

Finally, building off of existing active programming, the plan activates Kingston Point Park as a regional activity park, and adds additional amenities such as a large-scale adventure playground, sports fields, and picnic shelters. The topography of the park creates high points that encourage investment in pavilions, restrooms, and other amenities that would turn the park into a regional waterfront destination.

HABITAT STRATEGIES

The Kingston BOA has ample natural assets along the Hudson River and Rondout Creek, though the industrialization of much of the waterfront has meant that historically many of these assets have become isolated, compromised or inaccessible to the public. The Hudson acts as an avian highway—the North American Flyway and many species such as Osprey use the Kingston waterways for feeding and resting during spring and fall migrations. Kingston Harbor and Rondout Creek provide critical habitat for migratory fish species that move from the Atlantic to freshwater havens for spawning. The American Shad, among other anadromous species, migrates up the Hudson and seeks refuge in Rondout Creek, while large and small mouth bass find overwintering habitat in the critical wetland habitat south of Kingston Point Park. Currently, man-made Island Dock has grown into a hardwood forest ecosystem, providing a critical node of habitat for nesting birds, mammals, and insects.

The Habitat Strategies set out to restore and protect existing natural habitat, as well as integrate new habitat corridors throughout the BOA. The strategies include providing new habitat opportunities at the edges through selective softening of the shoreline, creating reef streets that provide small niches and vegetation for fish to hide and spawn, by restoring existing wetlands and creating wetland buffers, and creating educational trails and access points for birders, school children and citizens to learn about and access these abundant natural resources. These strategies are discussed in detail by zone below.

ZONE 1: RESILIENT RONDOUT

A key strategy in Zone 1 is the acquisition of Island Dock by the City to protect Island Dock as a forested public park in perpetuity. A light-touch design carves out trails and small groves for art installation within the existing canopy, retaining a maximum amount of habitat while creating a unique experience of nature for Kingston residents. Reforestation and reseeding of gravel areas would allow natural succession to be an active program within of the park.



FIGURE 06.27 Osprey use waterways for feeding



FIGURE 06.28 American Shad use Kingston Harbor and Rondout Creek

The 'complete' East Strand Street acts as a greenway corridor, planted with floodplain and riparian trees and vegetation that can handle a range of water levels, while providing food and habitat for local fauna. Increased tree canopy along streets throughout the Rondout will provide beauty for residents, and habitat for migrating species.

In addition, the waters of the inlet north of Island Dock are currently partially stagnant, due to three abandoned barges that restrict the water flow to the mainland and prevents tidal flow from freely moving. This plan advocates that the barges be removed to restore tidal flow. This will drastically improve water quality and habitat within the inlet for freshwater species and reverse the accumulation of sediment in the Inner Channel.

ZONE 2: ADAPTIVE EDGE

As part of the cut-and-fill strategy (see section on Cut-Fill Strategy below), the shoreline south of Ponckhockie would be reshaped to create Reef Streets that align with the street grid, building up developable parcels and creating water inlets to safely adapt to rising Hudson levels. Selective edges would be softened to support wetland vegetation, while an eco-concrete rip-rap (a low pH concrete that supports aquatic vegetative growth) would line the hardened edges used for marine industry and dock access.

Additionally, the plan advocates that larger sections of one of these reef street be utilized for pilot fish freshwater habitat creation, which could be a part of the larger Hudson River Estuary Program. Habitat creation techniques may include the use of eco-concrete modules, riffle construction, eelgrass planting, and freshwater mussel bed seeding.

Large bioswales in these zones are also planted in native perennial and meadow mixes, providing food and habitat for key pollinators.

ZONE 3: ECO ZONE

This area boasts one of the largest wetland regions along the Rondout and provides key habitat for fish spawning and overwintering. It is also a critical stop-over for migratory species along the Hudson River Flyway. However, as sea levels rise in the coming decades, these wetlands are at risk of declining unless wetland buffers are created that allow space for the wetlands to migrate upland with the rising waters. A wetland migration buffer is thus a key habitat strategy to ensure that this habitat remains despite shifting water levels.

Rather than cutting off residents to their wetland resources, this plan proposes creating a learning boardwalk that would allow residents and school groups to study and access these remarkable amenities. Bird blinds and overlook decks would create safe spaces to view migrating species, and increase awareness of this often overlooked waterfront resource. The boardwalks would be sensitively constructed to have the minimal amount of disturbance to existing wetlands.

Beyond the boardwalks, the elevated walkway to the Lighthouse could provide another ideal pilot project for fish habitat creation, through the use of eco-concrete pier casings.



FIGURE 06.30 Example of learning boardwalks



FIGURE 06.29 *Eco-concrete can create fish habitat*



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RESILIENCY STRATEGIES

The study area is vulnerable to flooding from both above and below. Waterfront flooding from the Rondout Creek results from heavy rainfall, while Hudson River flooding brings waters from high tide events and storm surges upstream. Additionally, runoff from upland stormwater moves downhill to the Rondout valley. Currently flooding in the Rondout is expected to worsen over the coming decade as the sea levels rise with the potential to accelerate over the coming century. The Sea-Level rise projections adopted by the Planning for Rising Waters: Final Report of the City of Kingston Tidal Waterfront Flooding Task Force are up to 3 feet over the next fifty years.

	2060s	2100
Sea-level Rise	20"	33"
Sea-Level Rise with Rapid Ice Melt	36"	68"

FIGURE 06.32 Sea-level rise projections

The success of any long term development will depend on being able to protect and respond to a range of flooding scenarios.

This plan adopts the Flooding Task Force Guidelines for sea level rise and Flood Projections through 2100—and plans for a range of scenarios that include a potential rise in Hudson levels of 20" to 36" by 2060. The strategies adopted from the Task Force include:

- Using natural systems to reduce flood risk and erosion-- including green buffers, bioswales, berming and elevated right-of-ways;
- **2** Promoting a waterfront economy and economic revitalization alongside resiliency efforts by including both hard and soft edges;
- **3** Promote Kingston's Climate Action Plan through reducing greenhouse gas emissions through green infrastructure and green architecture;
- 4 Using natural shorelines and innovative architecture to create resilient neighborhoods,
- **5** Reducing stormwater, upland flooding and combined sewer overflow through green infrastructure and best stormwater management practices;
- 6 Providing areas for wetlands and high waters to migrate inland;
- **7** Adapting all new development within the projected flood zone to the rising sea levels and increased flood risk.



FIGURE 06.33 Bioswales are an example of a resiliency strategy

In addition, rather than creating expensive walls or barriers that increase risk of a catastrophic breach while cutting off the community from the waterfront, this plan calls for a layered approach to resiliency that uses a toolkit of upland and lowland strategies to create a Resilient Rondout.

The strategies are outlined on the following pages, and are organized by zone to describe how each of the different layers of resiliency work in tandem: edge, buildings, surface, and community. As the eventual level of sea level rise is unknown, the use of a multi-layered system allows for a more flexible system than traditional sea wall or levee, traditional high-cost engineering solutions that can actually produce dangerous, high risk flooding scenarios if they underestimate the height of future water levels even by an inch. By creating a layered defense, this strategy produces a resilient and flexible edge that can adapt to rising waters from multiple sources and at multiple levels.



FIGURE 06.34 Resiliency Strategies



ZONE 1: RESILIENT RONDOUT

This area includes strategies that will help existing historical buildings adapt to rising waters and runoff from uphill regions.

EDGE

A raised boardwalk along the Rondout waterfront is armored with a deployable floodwall that flips up in times of high waters, and flattens to allow access to the waterfront at other times. Additionally, restoring flow to the Island Dock inner channel will allow flood waters to outflow more rapidly, lessening the impact of peak stormwater events.

BUILDINGS

Existing buildings within the updated 2060 floodplain are retrofitted with either (1) dry flood proofing- building or site modifications that prevent water from entering during a flood event, or (2) wet floodproofing-- building modifications such as vents that allow a building to strategically flood in times of high water without causing structural damage. New infill buildings within the 2060 100-yr floodplain must be designed to be resilient to Kingston Flooding Task Force projections.

SURFACE

Permeable surfaces will replace hardscape wherever applicable to increase stormwater retention and reduce flooding downhill. The green 'complete' East Strand Street will feature linear bioswales and increased tree plantings to act as linear sponge for stormwater from both up and downhill. The most likely remediation plan at Island Dock will be installation of a membrane covered with soil capping which will result in a raised elevation on the property.

COMMUNITY

The community is a robust network of business owners and local residents who use this area as a hub for gathering, social events and information sharing. The area around Broadway especially feels as the town square of the waterfront. This area should continue to grow as the organizational center of the community and serve as the command center in the case of an event and rallying in times of need. This should be also the community core that helps fight for the appropriate direction of development and investment in the Hudson Riverport at Kingston.



FIGURE 06.35 Zone 1 Resiliency Strategies



INFILTRATE

RETAIN





PROTECT

PERMEATE

FLIP

ZONE 2: ADAPTIVE EDGE

This area includes strategies for new development on current brownfield sites outside of the floodplain, and for reducing stormwater runoff from adjacent Ponckhockie uphill.

EDGE

A cut-and-fill strategy (see detailed steps of Cut-Fill Strategy below), the shoreline would be reshaped to create Reef Streets that align with the street grid to open up views, build up developable parcels and create water inlets to safely adapt to rising Hudson levels. Sloped landforms would allow easy access to the waterfront, while selective softened edges would be planted to create habitat and buffer waters from Hudson River storm surges.

BUILDINGS

All building sites are elevated via cut and fill above the 2060 100-yr floodplain.

SURFACE

The East Strand linear bioswale empties into two large bioswale areas that direct and absorb flooding from uphill and provide a secondary area for overflow for Rondout and Hudson flood waters. Public access spaces will be created from permeable surfaces and pavement, vegetated areas and tree plantings to create floodable and resilient public spaces.

COMMUNITY

As the most vulnerable location for development within the BOA boundary community resiliency will be a key theme and focus. Reinforcing networks and providing a range of housing options ensures a diverse community of all income and social levels while balancing new development with the existing Ponckhockie neighborhood. It will also be critical to make physical and virtual connections between water and community. The waterfront needs to provide plenty of shade opportunities to address raising temperatures. Buildings and landscape need to address flood and storm events and provide areas of refuge and place for communities to come together and organize.





INFILTRATE

PERMEATE

FIGURE 06.36 Zone 2 Resiliency Strategies





RESTORE

ACCESS

MOUND

ZONE 3: ECO ZONE

This area focuses on preserving the best tool Nature has against flooding: wetlands.

EDGE

Wetlands located along the Rondout and the Hudson serve a key ecosystem benefit by intercepting overland flow and detaining floodwaters. Wetland vegetation dissipates the velocity of flood water and anchors soil, thus decreasing erosion. By temporarily storing and slowing overland flow and floodwaters, wetlands serve to reduce flooding, erosion, and property damage. However, as sea levels rise, wetlands must be allowed to migrate uphill to maintain their size and resiliency benefits. The plan advocates for protecting these wetlands by creating a buffer within the new Flood Task Force 2100 100-year floodplain, allowing room for wetlands to migrate inland. Educational signage would be included to help residents understand the important role these wetlands are playing in creating a resilient Kingston.

BUILDINGS

Sensitive development of an eco-hotel would include innovative stilting architecture that would have a light touch on the landscape and allow flooding waters to move unimpeded.

SURFACE

Preservation of existing canopy and wetlands will ensure that this zone functions as a sponge for runoff of stormwater from uphill that causes downhill flooding as well as waterfront flooding. Any new roads to the eco-hotel will be composed of permeable surfaces.

COMMUNITY

The community focus here is on advocacy, education and protecting the delicate ecosystem. With a focus on experiencing the water, the views and the environment to connect to larger systems. The community organizes around a similar mission to restore, preserve and enhance the natural beauty and habit and passes that commitment on to future generations.





STILT

FIGURE 06.37 Zone 3 Resiliency Strategies





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CUT AND FILL STRATEGY

This section looks more closely at the Cut and Fill strategy utilized for Zone 2, the Adaptive Edge. As described in the resiliency section of this document, this area is not only prone to flooding but also at high risk of inundation from sea level rise in the coming decades. The areas within this zone are all historic or active industrial sites, with a high risk of contamination from a mix of organic and nonorganic pollutants, including two prior spills confirmed by the NYSDEC. As sea levels rise, the risk of in-soil contaminants leaching into the Rondout and the Hudson only grows, so doing nothing in this area could have unfortunate long-term consequences beyond the sites.

This plan proposes a cut + fill strategy to both treat contamination on site and bring development parcels out of the flood plain. Given that moving fill on site is much less expensive than trucking fill in from off site, this is also a cost effective measure for addressing both contamination and flooding. This process has been used at brownfield sites throughout the world, including the Olympic Park in London. As the exact amount and specific type of contaminants can only be estimated through historical use, the following steps are recommended to refine the strategy in the future:

STEP 1: TESTING

Soil and groundwater is tested for concentration and type of contaminant. Areas of high contamination with high cost for treatment (i.e. some heavy metals) can be disposed of offsite.



Soil is moved on site to bring parcels to a minimum of +11 North American Vertical Datum (NAVD), as recommended by the Flooding Task Force. Due to changing Sea Level Rise scenarios, a more aggressive minimum height of +13 - 16 (NAVD) may need to be considered in key locations, and should be reviewed prior to further design and implementation. The cut soil undergoes remediation on site specific to contaminant. Given the available information, it is believed that a majority of the contaminated soil can be treated with in-situ methods such as soil washing, thermal treatment, bioremediation and/or containment. Depending on the remediation process chosen, it may take anywhere from a few months to several years before a site would be ready for development. Time could be saved by disposing of the most contaminated soils offsite.

STEP 3: ADAPT

The edge is reshaped and replanted to create new habitat opportunities, buffer rising water levels and future storm surge, reduce shoreline erosion, prevent contamination of waterways, and provide resilient parcels for development.



FIGURE 06.38 Soil washing technique



Flood task force projected 2100 SLR

STRATEGIC SITES

Five strategic sites have been identified through the BOA designation process. Three sites in the original BOA Step 2, and two additional sites in the new BOA Boundary expansion. These sites are documented in the Strategic Sites Section of Section 4. These sites can anchor future development efforts and are the key parcels necessary for the overall redevelopment plan to be completed efficiently. The sites were identified as focus sites because they are strategically located, have high capacity for redevelopment, can catalyze other economic investment, and some have historical uses that indicate a significant chance of environmental contamination which requires additional investigation. Others are high profile sites that offer unique opportunities to propose key developments that will help in the branding and momentum building of the overall waterfront.

The following conceptual plans for each of the five strategic sites represent a possible development that fits within the land use recommendations and the overall vision and goals of the Hudson Riverport at Kingston Vision Plan. These ideas do not constitute an actual commitment to a development, program or design but instead shows potential given the recommended framework. Each site is shown with a preferred option and an alternative to represent diversity and flexibility. Ultimately each site will need to respond to market demands and requires further investigation and design.





KOSCO ASSEMBLAGE

This site is 4.14 acres on the south side of East Strand, adjacent to the former L&M Auto Parts Site. The site was acquired by Historic Kingston Waterfront, KOSCO, LLC in September 2007. The site is currently rented to local artisans and is rented by the NY State Police, Ulster County Sheriff's Department and DEC to dock emergency response vessels. It was the location of the Kingston Oil Supply Company (KOSCO) Service Department. Until seven years ago, the site was the base for 25 technicians for residential and commercial heating customers and marine fueling terminal. Tanks were removed from the site seven years ago. However, there is no evidence of any spills or leakage from the KOSCO tanks. The site is surrounded by a chain link fence and includes four one-story structures. Historically, the site was used for rail operations.



FIGURE 06.40 KOSCO Assemblage - Existing Condition



FIGURE 06.41 KOSCO Assemblage - Preferred Option

PREFERRED OPTION

The site can be reshaped with a cut and fill strategy and any contamination can be dealt with in-situ and is not an obstacle to redevelopment. The site work maintains view corridors along streets and provides new means to engage the waterfront. Two new development sites will be created outside of the floodplain. This site is an opportunity to bring city fabric to the waterfront and a vibrant mixed-use community. Each building will be retail and maker space at the ground floor with residential above. Buildings range from 3 - 4 stories and provide a range of unit types including market rate, senior housing, artist lofts and affordable units.

Total long-term development in the preferred option: 60,000 SF including 38 residential units.



FIGURE 06.42 KOSCO Assemblage - Design Alternative

DESIGN ALTERNATIVES

In the design alternative it is assumed that no large scale site work would be performed to address flooding and remediation issues. Instead the edge would remain approximately in the same location and a 50 foot right of way would be preserved for recreation and resiliency efforts. A single development lines East Strand Street north of the trolley tracks. The anticipated use for this would be flexible office space with retail at the ground floor. Because of limited site work the building parcel would need to be lifted roughly 6 feet out of the flood plane to ensure a safe ground floor. Parking is captured on site and placed in the basement to bring the ground floor up.

Total long-term development in the alternative option: 45,000 SF of flexible office space with retail at the base. No residential units are included in this alternative.

ECONOMIC IMPACT ANALYSIS

Figure 06.43 provides the program plan for the proposed development of KOSCO Assemblage.

On this basis and using the key assumptions, the proposed development of KOSCO Assemblage is anticipated to generate the economic impacts seen in Figure 06.44.

PHAS	E	LAND AREA	TOTAL (EXCL. PARKING)	COMMERCIAL	RETAIL	HOTEL	CIVIC	RESIDENTIAL		SURFACE PARKING	STRUCTURED PARKING	
no	years	SF	SF	SF	SF	SF	SF	SF	no. of units	no. of units	no. of units	SF
1	2016-2020	-	-	-	-	-	-	-	-	-	-	-
2	2021-2030	-	-	-	-	-	-	-	-	-	-	-
3	2031-2040	15,000	60,000	-	15,000	-	-	45,000	38	20	-	-
4	2041-2050	-	-	-	-	-	-	-	-	-	-	-
		15,000	60,000	-	15,000	-	-	45,000	38	20	-	-

FIGURE 06.43 KOSCO Assemblage Program Plan

PHASE		ONE TIME JOBS	ONGOING JOBS	ONE TIME TAXES	ONGOING TAXES	20 YEAR PV OF TAXES (ONETIME AND ONGOING)	TOTAL ANNUAL ECONOMIC IMPACT
no.	years						
1	2016-2020	-	-	-	-	-	-
2	2021-2030	-	-	-	-	-	-
3	2031-2040	56	17	\$616,046	\$389,541	\$6,288,361	\$2,384,177
4	2041-2050	-	-	-	-	-	-
		56	17	\$616,046	\$389,541	\$6,288,361	\$2,384,177

FIGURE 06.44 KOSCO Assemblage Economic Impact Analysis

THE LANDING

Kingston Landing is located southeast of the intersection of North Street and East Strand, bordered on the north and the west by B. Millens Recycling operations. This 3.77 acre site is vacant land and marshland located at the mouth of the Rondout Creek. It offers unobstructed views of the Hudson River, Kingston Point Lighthouse and surrounding environs. The property was acquired by Historic Kingston Waterfront, Kingston Landing, LLC in April 2005. The site is reclaimed land. During the 1970's a portion of the eastern area was reclaimed using fill material. About half of the parcel is submerged at high tide. The western half of the property is marshland. There is a boat launch ramp to the Rondout Creek at the southwest corner of the property. The property has 215 feet of frontage along the east side of North Street. There are currently no on-site structures. The site was formerly used as a marina from the early 1970's to the 1980's. The most appropriate reuse for this property is likely to be a destination project that will take advantage of its prominent location, such as a restaurant, retail and cultural uses.



FIGURE 06.45 The Landing - Existing Condition





PREFERRED OPTION

The site will not be reshaped but any contamination can be dealt with dealt with in-situ and is not an obstacle to redevelopment. A single development parcel will be created above the flood plain. The proposed development on site will be a focused single building of 2 - 3 stories that creates a mixed-use trolley terminal with retail and cultural space. This trolley stop becomes the major hub for the eco-hotel destination and provides opportunities to access the waterfront, day-liner trail and access the lighthouse trail. There would be a concentration of uses that would entice people to get off the trolley and spend a couple of hours. Minimal on-site parking is provided and instead a district parking garage at North Street and East Strand.

Total long-term development in the preferred option: 5,500 SF.



FIGURE 06.47 The Landing - Design Alternative

DESIGN ALTERNATIVES

The site will remain as is, there is no major cut-fill proposed or other soil movement. Contamination can be treated on-site where feasible. Remaining contamination can be removed and soil replaced from an external source. A development site can be raised out of the floodplain on stilts and a simple platform will be created for a trolley stop. The main focus of the development is a water and research institute that can take full advantage of location.

Total long-term development in the alternative option: 35,000 SF

ECONOMIC IMPACT ANALYSIS

Figure 06.48 provides the program plan for the proposed development of The Landing.

On this basis and using the key assumptions, the proposed development of The Landing is anticipated to generate the economic impacts seen in Figure 06.49.

PHAS	E	LAND AREA	TOTAL (EXCL. PARKING)	COMMERCIAL	RETAIL	HOTEL	CIVIC	RESIDENTIAL		SURFACE PARKING STRUCTURED P		ING
no	years	SF	SF	SF	SF	SF	SF	SF	no. of units	no. of units	no. of units	SF
1	2016-2020	-	-	-	-	-	-	-	-	-	-	-
2	2021-2030	-	-	-	-	-	-	-	-	-	-	-
3	2031-2040	5,500	5,500	-	2,000	-	3,500	-	-	5	-	-
4	2041-2050	-	-	-	-	-	-	-	-	-	-	-
		5,500	5,500	-	2,000	-	3,500	-	-	5	-	-

FIGURE 06.48 The Landing Program Plan

PHASE	E	ONE TIME JOBS	ONGOING JOBS	ONE TIME TAXES	ONGOING TAXES	20 YEAR PV OF TAXES (ONETIME AND ONGOING)	TOTAL ANNUAL ECONOMIC IMPACT	
no.	years							
1	2016-2020	-	-	-	-	-	-	
2	2021-2030	-	-	-	-	-	-	
3	2031-2040	7	2	\$76,712	\$41,063	\$674,651	\$271,535	
4	2041-2050	-	-	-	-	-	-	
		7	2	\$76,712	\$41,063	\$674,651	\$271,535	

FIGURE 06.49 The Landing Economic Impact Analysis

MILLENS & SON SCRAP METAL RECYCLING

Millens & Son Scrap Metal Recycling operates its vehicle and equipment maintenance facility at the end of North Street. The site includes a small brick and concrete block structure built at the front of the lot that is used for vehicle and equipment maintenance and storage. A gravel area to the east of this building is used to store trailers, miscellaneous heavy equipment and scrap metal in rolloff containers. Historically the site has been used for cement works, storage and vehicle maintenance. The Landing and KOSCO sites assemblages are the critical areas for redevelopment. The KOSCO site is strategically located adjacent to the Millens Property and the Central Hudson Former Coal Gas Facility, which is also under consent order. The Millens Site has been recently added to the State list in the second half of 2008 and there is a consent order for that site as well.



FIGURE 06.50 Millens & Son - Existing Condition



FIGURE 06.51 Millens & Son - Preferred Option

PREFERRED OPTION

The site is combined with adjoining properties to create a destination 40 key ecohotel site. These sites include private and public lands mostly of condemned houses that have sustained damage from flooding and are beyond repair. The construction of the hotel would be low impact, such as building on stilts with small footprints, to preserve the sensitive nature of the site. Likewise, the building will be kept low, 1 - 2 stories to maintain views and limit impact. The hotel would be one larger structure to house common facilities such as check-in, restaurant, meeting space, offices and back-of house services. Guest rooms would small, low impact bungalows sited in the wetlands along a boardwalk.

Total long term development in the preferred option: 35,000 SF including 40 hotel units.



FIGURE 06.52 Millens & Son - Design Alternative

DESIGN ALTERNATIVES

No Site assemblage would be formed. The site would be utilized as a small scale civic and event destination with supporting classroom space. Given the limited ability to develop due to extreme flooding issues this alternative focuses on the portion of the site at the highest elevation and closest to the road.

Total long term development in the alternative option: 20,000 SF
KEY SITES: MILLENS AND SON SCRAP METAL RECYCLING

Figure 06.53 provides the program plan for the proposed development of Millens and Son Scrap Metal Recycling.

On this basis and using the key assumptions, the proposed development of Millens and Son Scrap Metal Recycling is anticipated to generate the economic impacts seen in Figure 06.54.

PHASE		LAND AREA	TOTAL (EXCL. PARKING)	COMMERCIAL	RETAIL	HOTEL	CIVIC	RESI	DENTIAL	SURFACE PARKING	STRUCTURED PARKING
no	years	SF	SF	SF	SF	SF	SF	SF	no. of units	no. of units	no. of units SF
1	2016-2020	-	-	-	-	-	-	-	-	-	
2	2021-2030	35,000	35,000	-	3,000	32,000	-	-	-	45	
3	2031-2040	-	-	-	-	-	-	-	-	-	
4	2041-2050	-	-	-	-	-	-	-	-	-	
		35,000	35,000	-	3,000	32,000	-	-	-	45	

FIGURE 06.53 Millens and Son Program Plan

PHASE		ONE TIME JOBS	ONGOING JOBS	ONE TIME TAXES	ONGOING TAXES	20 YEAR PV OF TAXES (ONETIME AND ONGOING)	TOTAL ANNUAL ECONOMIC IMPACT
no.	years						
1	2016-2020	-	-	-	-	-	-
2	2021-2030	48	35	\$538,864	\$621,833	\$9,593,709	\$7,882,326
3	2031-2040	-	-	-	-	-	-
4	2041-2050	-	-	-	-	-	-
		48	35	\$538,864	\$621,833	\$9,593,709	\$7,882,326

FIGURE 06.54 Millens and Son Economic Impact Analysis

BLOCK PARK/ISLAND DOCK

Block Park is a 7 acre site located between Abeel and Ravine Streets and the inner channel of Rondout Creek from Island Dock. Block Park is currently a City operated public space and includes a softball diamond, basketball courts, seasonal bathrooms, handball courts, a pavilion, picnic area, and a playground. The park occasionally floods during heavy rain both from the creek and from upland water flowing down the hill to the north. The water pools in the south west corner of the park. Also included in the strategic site is the privately owned Hideaway Marina.

Island Dock is a 17 acre (including water) manmade island that is currently privately owned. Historically, it was a transfer point for coal from small boats carrying it on the Rondout to large boats that would carry it on the Hudson to New York City. The island is currently covered with trees and contains a private dirt road for vehicular access.



FIGURE 06.55 Block Park / Island Dock - Existing Condition

PREFERRED OPTION

As described previously, the preferred long term option proposes that Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) might be purchased by the City of Kingston, possibly with the participation and/or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition. In this option, the mainland is primarily a residential development with ground floor retail opportunities



FIGURE 06.56 Block Park / Island Dock - Preferred Option

in the eastern-most buildings. Hideaway Marina could be relocated to the northeasternmost portion of the site boundary where it would maintain its existing capacity. German Street is extended from the Rondout diagonally through the development parcel and Abeel Street is straightened out as it cuts east-west through the development parcel.

Bioswales and other disaster mitigation infrastructure are incorporated into the landscape between buildings along with a network of pedestrian walk ways. The Greenline, trolley line (in the long-term), and boardwalk extend from Ravine Street west along the water to the entrance to Island Dock. The softball diamond is relocated to the south west corner of the parcel. A parking lot with pervious pavement is located adjacent to it as vehicular traffic is restricted from Island Dock.

On the Island, existing trees are largely preserved as minimal walking trails are provided throughout. Small clearings are created where sculptural art can be displayed. At the eastern tip of the island, a small amphitheater provides a venue for musical and theatre performances or outdoor movies.

A pedestrian bridge connects the island to Hone Street on the mainland. This bridge is elevated to allow for tall boats to pass underneath.

Total long term development in the preferred option: 538,000 including 321 residential units.



FIGURE 06.57 Block Park / Island Dock - Design Alternative

DESIGN ALTERNATIVES

The design alternative suggests that there will be no change in ownership at Block Park and Island Dock. Instead Island Dock remains as a private development. Here Island Dock is turned into a small scale mixed-use community similar to Roosevelt Island. Development is kept in the center of the island to maintain a green promenade at the perimeter. The street grid is extended to the island to maintain views and create a comfortable organization strategy that the community was accustomed to. Given the one road access, roads need to be incorporated within the island upgrades as well as the additional infrastructure upgrades to facilitate a community of this size. Buildings ranging from 2 - 6 stories with parking in the basement are created in clusters. The parking is used to bring the building above the flood line.

Total long term development in the alternative option: 650,000 including 400 residential units.

ECONOMIC IMPACT ANALYSIS

Figure 06.58 provides the program plan for the proposed development of Block Park/Island Dock.

On this basis and using the key assumptions, the proposed development of Block Park/Island Dock is anticipated to generate the economic impacts seen in Figure 06.59.

PHASE		LAND AREA	TOTAL (EXCL. PARKING)	COMMERCIAL	RETAIL	HOTEL	CIVIC	RESI	DENTIAL	SURFACE PARKING	STRUCTURED	PARKING
no	years	SF	SF	SF	SF	SF	SF	SF	no. of units	no. of units	no. of units	SF
1	2016-2020	-	-	-	-	-	-	-	-	-	-	-
2	2021-2030	-	-	-	-	-	-	-	-	-	-	-
3	2031-2040	-	-	-	-	-	-	-	-	-	-	-
4	2041-2050	96,000	461,000	51,000	25,000	-	-	385,000	321	40	200	65,000
		96,000	461,000	51,000	25,000	-	-	385,000	321	40	200	65,000

FIGURE 06.58 Block Park / Island Dock Program Plan

PHASE		ONE TIME JOBS	ONGOING JOBS	ONE TIME TAXES	ONGOING TAXES	20 YEAR PV OF TAXES (ONETIME AND ONGOING)	TOTAL ANNUAL ECONOMIC IMPACT
no.	years						
1	2016-2020	-			-	-	-
2	2021-2030	-	-			-	-
3	2031-2040	-	-	-	-	-	-
4	2041-2050	405	210	\$4,423,712	\$4,814,221	\$74,526,154	\$47,099,924
		405	210	\$4,423,712	\$4,814,221	\$74,526,154	\$47,099,924

FIGURE 06.59 Block Park / Island Dock Economic Impact Analysis

NOAH HOTEL SITE

The Noah Hotel site is approximately 1.75 acres and it includes a group of vacant and under utilized properties previously studied and cleared for redevelopment. It is located at the intersection of Abeel Street and Hone Street. The site is a hill site and therefore offers frontage both on Abeel Street and W. Strand Street/Dock Street. The site in the past has been identified as a potential hotel site and is where the site gets its informal nickname, the Noah Hotel Site. There are sweeping views of Rondout Creek from the upper level and it offers proximity to Island Dock and a potential to connect at the higher elevation of Abeel Street without affecting boating.

The site is strategically located at the mid-point between Block Park and Broadway with significant proximity to recreational boat activity. Directly across of W. Strand Street/Dock Street is the pedestrian promenade that runs the majority of the waterfront. There is no sidewalk on parcel side of the street on W. Strand/Dock Street.



FIGURE 06.60 Noah Hotel Site - Existing Condition



FIGURE 06.61 Noah Hotel Site - Preferred Option

PREFERRED OPTION

The Noah Hotel site will be developed as it was originally planned as a hotel. This provides a unique opportunity to cater to recreational boaters looking for a more formal night stay off the water. It would also fulfill an unmet need for capturing Hudson Valley tourists looking to spend extended time in a quaint Hudson Valley River Community. The hotel is double sided in that the building can be accessed both at the upper level of Abeel Street and the lower level at W Strand Street. The more traditional hotel drop off and entrance could be off the upper level while the lower level would capture the traffic from the waterfront promenade and would include retail—such as a gourmet general store for recreational boaters. A series of roof terrace would provide restaurant seating and viewing opportunities of the Rondout Creek.

An additional 2 - 4 story commercial building would be co-located on the site to provide space for maritime focused office and support space. Between the two buildings would be a series of public terrace landscape spaces that create a green connection from the upper level and lower level. This is an opportunity to create a connection point to Island Dock and incorporate it into the development.

Given the need to incorporate parking onsite for hotel guests, parking could be part of the larger district wide strategy to provide a municipal garage here and bury parking into the hillside.

Total long term development in the preferred option: 272,500 including 150 key hotel.



FIGURE 06.62 Noah Hotel Site - Design Alternative

DESIGN ALTERNATIVES

The alternative scheme calls for separating the upper level development from the lower level development which lends itself better to long term phasing that would respond to the market. Upper level development is reserved for small scale residential development which is in line with existing development on Abeel Street. The lower level development is retail that focuses on the recreational boaters and flexible work space for innovative and growing companies and those needing temporary office space.

Total long term development in the alternative option: 125,000 including 30 units of housing.

ECONOMIC IMPACT ANALYSIS

Figure 06.63 provides the program plan for the proposed development of Noah Hotel Site.

On this basis and using the key assumptions, the proposed development of Noah Hotel Site is anticipated to generate the economic impacts seen in Figure 06.64.

PHASE		LAND AREA	TOTAL (EXCL. PARKING)	COMMERCIAL	RETAIL	HOTEL	CIVIC	RESI	DENTIAL	SURFACE PARKING	STRUCTURED	PARKING
no	years	SF	SF	SF	SF	SF	SF	SF	no. of units	no. of units	no. of units	SF
1	2016-2020	-	-	-	-	-	-	-	-	-	-	-
2	2021-2030	-	-	-	-	-	-	-	-	-	-	-
3	2031-2040	54,500	230,000	70,000	40,000	120,000	-	-	-	-	150	48,750
4	2041-2050	-	-	-	-	-	-	-	-	-	-	-
		54,500	230,000	70,000	40,000	120,000	-	-	-	-	150	48,750

FIGURE 06.63 Noah Hotel Site Program Plan

PHASE		ONE TIME JOBS	ONGOING JOBS	ONE TIME TAXES	ONGOING TAXES	20 YEAR PV OF TAXES (ONETIME AND ONGOING)	TOTAL ANNUAL ECONOMIC IMPACT
no.	years						
1	2016-2020	-	-	-	-	-	-
2	2021-2030	-	-	-	-	-	-
3	2031-2040	308	393	\$3,402,056	\$6,482,966	\$97,803,977	\$89,367,720
4	2041-2050	-	-	-	-	-	-
		308	393	\$3,402,056	\$6,482,966	\$97,803,977	\$89,367,720

FIGURE 06.64 Noah Hotel Site Economic Impact Analysis

ECONOMIC IMPACT ANALYSIS

METHODOLOGY

The U.S. Department of Commerce's Bureau of Economic Analysis produces multipliers to help calculate total gross output, value added, earnings, and employment in different counties across the country. This model is called Regional Input-Output Modeling System (RIMS II). The project team has used RIMS II multipliers for Ulster County, New York to create a bespoke model to estimate both direct and indirect economic impacts from the subject project.

In general, a project's total economic impact is the sum of three different economic impacts generated by that project, as calculated by the RIMS II model: the direct impact, the indirect impact, and the induced impact. These impacts can be defined as follows:

DIRECT IMPACT

A project's direct impact consists of the initial expenditures made to carry out that project. For example, the direct impact of a construction project would consist of the payments that the real estate developer makes to his local construction contractor and architect. Following construction and occupation of the project, the direct impact of an influx of new tenants would consist of the amounts these tenants spend to purchase goods and services in the local economy.

INDIRECT IMPACT

A project's indirect impact captures the impact of expenditures made by local businesses as they increase production in response to a developer's or a resident's initial purchases. For example, to complete a construction project, a construction contractor will purchase materials from local vendors, such as plywood, brick and windows. With the payments it receives for these purchases, these local vendors will pay wages to local workers and replenish their inventories by purchasing goods from their suppliers.

INDUCED IMPACT

A project's induced impact measures the impact of workers employed by this project spending their earnings within the local economy. Examples of induced expenditures include a local construction manager using her project-related bonus to buy a new car or a local carpenter using his wages to take his family out to dinner more often.

For the purposes of analyzing this development, we calculate the following indicators:

- One time jobs;
- On-going jobs;
- One time taxes;
- On-going taxes, and
- Total annual economic impact.

The following section provides the key assumptions used to calculate the aforementioned indicators.

KEY ASSUMPTIONS

Figure 06.65 provides several of the key assumptions used in the economic impact analysis model:

ASSET CLASS	RATIO OF JOBS PER SF	DEVELOPMENT COSTS PER SF
Office	1 : 250	\$167
Retail	1 : 1,000	\$183
Residential	1 : 25,000	\$107
Hotel	0.3 : 300	\$185
Other / Civic	-	\$161

FIGURE 06.65 Key Assumptions used in the economic analysis model

- 2 Development cost metrics are averages from project team internal research and RS Means, a cost estimating company that publishes information for the public. Please note that the estimates do not include:
 - Land costs and associated acquisition costs;
 - Cost of the infrastructure improvements associated with the subject project.
- **3** Hotel metrics are averaged from consultations with professionals from economic consulting firms with specialties in hotel econometrics.
- 4 We include limited impact from residential properties since they are typically associated with few direct ongoing jobs and thus limited direct ongoing economic impact. However, a conservative tax is applied to the implied increase in localized discretionary income were the units to be occupied.
- **5** In order to ensure conservative tax estimates, we only draw estimates from Sales Tax, Income, and Hotel Tax to calculate our tax estimate. This group of taxes is what we are most comfortable estimating given the current data. There may, however, be potential for additional tax income.
 - Ongoing taxes are comprised of Sales (8%), Income (4%), and Property Tax estimates (3.2%);
 - One time tax results are comprised of taxes on earnings, and materials purchases.

6 Net Present Value Calculations are discounted at 6%.

7 The total annual economic impact is the total spend (on-going) by businesses and residents.

¹ Jobs per square footage calculations are based on averages from project team client research and third-party sources.

SUMMARY OF FINDINGS

Throughout the four phases, which span from 2016 to 2050, the key sites are anticipated to have a significant economic impact on Kingston, New York. The project team estimates suggest that over 650 ongoing jobs could be brought to the area with just over 800 one time jobs. Conservatively, this would translate into over \$12M, annually, in additional tax revenue with \$9M in one-time tax revenue. When economic impact of the non-key sites is analyzed, the total annual and one time benefits more than doubles.

CATALYST OPPORTUNITIES

In order to catalyze development and further activate the study area, it will be important to attract one or two anchor tenants that intend to use the space for various functions during different days of the week / times of day – not just an office tenant or a large format retailer. For example:

MIXED USE BUILDING

In Quechee, VT there is a famous glass-blowing establishment called Simon Pearce. On the bottom floor, there is a glass-blowing factory. The first floor is a showroom / sales floor with a restaurant/bar. The third floor is a special events space. http:// www.simonpearce.com. A similar concept on the site would enhance employment opportunities and drive tourism.

TRADE/ART SCHOOL

Another potential idea is a trade/art school to capitalize on the existing creative population in the Downtown Waterfront Area. An art school would not only serve to drive housing demand for the area, but it could drive demand for artist loft / studio space. Alternatively, there could be a partnership with SUNY to facilitate a satellite program focused on agricultural production / technology / sustainability. These concepts, when paired with the plan to create a ship building school, would create a vibrant district, filled with young adults.

It will also be important to attract residents and visitors to the site with robust programming. The Kingston Waterfront Business Association is doing a superb job of promoting the Rondout with outdoor events such as the Night Market and holiday celebrations (i.e. 4th of July Fireworks) and marketing special events for member businesses. The group, which has formed partnerships with multiple state and local agencies for support, has extensive plans to further promote the district as a dynamic, living waterfront.

O7 IMPLEMENTATION STRATEGY AND COMPLIANCE

The previous sections of this report have thoroughly laid out the history of Kingston, the environmental context and the strategies for the revitalization of the Rondout Area. This section will provide more detail on how the previously discussed design strategies will be implemented, this follows on the earlier sections which layout the Phasing Strategy; that was to discuss the timing of implementation; this section will discuss how the implementation should actually occur. The discussion will include discussion of land use, regulatory and laws governing the area, as well as an evaluation of the options for management structures of the BOA Plan area that are essential to the success of the revitalization of the BOA Plan area and the Rondout.

PROPOSED ZONING MAP



FIGURE 07.66 Proposed Zoning Map

The proposed zoning for the BOA Area is to maintain the existing RF-R (Rondout Riverfront District) and extended where possible to capture these specific waterfront focused guidelines. This allows for a large diversity of program and works to achieve other waterfront focused goals the city has established. As the market evolves and the plan is built out it is recommended to revisit height restrictions to provide flexibility to consolidate development. This would maintain bulk and density rules but allows developments to go slightly higher in order to minimize footprints when considering resiliency strategies and building in flood plains.



IMPLEMENTATION PROJECTS MAP



FIGURE 07.67 Implementation Projects Map



IMPLEMENTATION STRATEGY

LAND USE IMPLEMENTATION TECHNIQUES

With the history of the BOA Plan area discussed earlier, the various BOA properties detailed, and the design strategy laid out along with the phasing plan, these next sections explain some of the real estate realities of implementing such a vision for the future. This will include the discussion of Land Use controls and techniques, and a discussion of the current and future guidelines for the BOA Area.

An important element of the Implementation Strategy are Land Use Controls. When used in regard to real property Land Use Controls broadly interpreted to mean: "any restriction or control, arising from the need to protect human health and the environment; that limits use of and/or exposure to any portion of that property, including water resources." In other words, it is important that during both during the design strategy and moving forward that the Implementation Plan for the BOA to ensure that the recommended and eventual land uses are "smart" – that they provide the City of Kingston with economic growth and proper development while also balancing the fact that some contamination, at one time, was present in the area, and that it is assumed that at some point in time this area will most likely be inundated with flood waters. All of these precautions have been taken in to account during the planning process, next the team will discuss how implementation will ensure that these precautions are kept in place moving forward.

Another important term to keep in mind when planning the redevelopment of areas such as the Rondout are "Institutional Controls." An Institutional Control, are those controls involving real estate interests, governmental permitting, zoning, public advisories, deed notices, and other 'legal' restrictions. The term may also include restrictions on access, whether achieved by means of engineered barriers such as a fence or concrete pad, or by 'human' means, such as the presence of security guards. Additionally, the term may involve both affirmative measures to achieve the desired restriction (e.g., night lighting of an area) and prohibitive directives (e.g., no drilling of drinking water wells).

Some examples of Land Use Controls and techniques were used by the City of Kingston in their Local Waterfront Revitalization Program (LWRP) Implementation Plan. In this plan there were five categories covered: Land and water (General character, uses; Bulk, Scale and Form; Façade composition, Building Materials and Colors; Environmental Quality (pollution prevention); Circulation and Access.

Another example of Land Use Controls or Strategies used in the City of Kingston was in the "Revitalizing Hudson Riverfronts Plan," published in 2010. This included conservation and development strategies prepared by the Scenic Hudson organization and the New York Department of State (NYDOS). This document was organized into various Development Principles; these Development Principles include language that encourages water-dependent and water-enhanced uses, connect people to the river, protects natural resources (fish and wildlife habitat, shorelines, ecological function of water), and protects scenic resources, while employing sound urban planning and sustainable design. The Plan encourages development of form-based design guidelines, specifically to: *"Adopt form-based codes or design guidelines to provide developers with a clear understanding of the community's vision for height, massing, and design of buildings, as well as their relation to the street and public spaces. Form-based codes foster predictable built environments and a high-*

quality public realm by using physical form (rather than separation of uses) as the organizing principles of the code."

All of these types of strategies, when implemented, can provide for a more livable community both for residents, businesses, and visitors alike. For example, combining residential, commercial, and civic uses in a building or set of buildings fosters an active and diversified street life and riverfront; which is enjoyable for visitors and residents and is better for business. This can be enhanced by providing wide sidewalks, attractive street furniture, and sufficient lighting while employing traffic-calming techniques like narrow driving lanes, street trees, and on-street parking, all of which foster pedestrian safety and comfort. Likewise, it is important to respect community scale and character, and to offer a diversity of housing options. To gain long-term economic savings through energy efficiency and reduce the environmental impact of development—including climate change mitigation—riverfront construction should strive to meet or surpass standards established by program such as the Leadership in Energy and Environmental Design (LEED) program.

In both of the above mentioned previous studies it was pointed out that the existing Design Standards and Guidelines would be important moving forward with the redevelopment of the Rondout Area. "A crucial part of the strategy was to create design standards requiring property owners to: 1) preserve existing trees and vegetation; 2) preserve existing façades of historic structures; 3) cluster buildings in groups to preserve open space; and 4) provide a continuous riverfront pedestrian esplanade the width of the property. The strategy also requires new construction to be in scale and character with existing buildings, and it aims to bring more residents to the district by requiring new structures to contain habitable spaces on second floors. It should be noted that the city planning board has the power to waive any of these standards."

Zoning – In addition to Design Guidelines and other Land Use Controls mentioned earlier, the city's Mixed Use Overlay District encourages the adaptive reuse of commercial and industrial buildings for multifamily rental housing and to create mixed-income, pedestrian-based neighborhoods. Affordable housing guidelines apply where five or more residential units are created; the Planning Board may deny a development permit if at least 20 percent of the residential units are not established as affordable. Development standards within the district limit commercial uses to street level and require that primary entrances of buildings face onto the street or a small park. They also require shade trees and human-scale lighting, and emphasize pedestrian connections in site plans. These are other important details about the basics of what real estate and land use controls and other elements are in Kingston and how they might affect (both positively and negatively) the redevelopment of the BOA Area.

In order to create a unified Kingston Waterfront that is revitalized, cleaned up and resilient to the present and future flooding that will occur a plan needs to be created for the Management of the Waterfront area. Because there are several options for how the City of Kingston might structure the management of the area the following section discusses the different structures and what might be the best for the implementation of the BOA Plan now and in the future. The organization and maintenance of the BOA Plan area will be vital to its growth and development and this will inform the City and the public about how this all might occur.

REGULATORY LAW ANALYSIS

Resources which codify the existing design standards, per se, in Kingston, are scattered throughout a number of source documents. The codified location of Design Standards is the Zoning Regulations/ Heritage Area Commission Regulations (2005). However, there are other important sources of guideline material. The fact that the current regulations are now 10 years old, and that Scenic Hudson, in 2010, recommended the shift to a "form based code" may make it possible to suggest substantial modifications; there are situations where the codified design guidelines are in conflict with the project teams' design strategy.

Equally important is the process for reviewing compliance. The current regulations define a "Review Board" to oversee applications in the District; later in the BOA Plan the project team suggests that Review Board should be incorporated into the BOA Management and Governance model. There are also elements, such as exterior signage, that are handled by the Planning Department, and any changes or updates to landmark structures is governed by HLPC.

In later sections of the BOA Plan the Project team goes into more detail about the zoning district in the area. At a fundamental level there is an RT Rondout District (1992), Rondout Creek District (2005) and RF-H Hudson Riverfront District in Kingston Zoning that contains quite specific and prescriptive Design Guidelines.

UPDATE TO DESIGN STANDARDS AND GUIDELINES FOR THE BOA

Design standards and guidelines already in place for the Kingston Waterfront BOA are high-quality, cohesive and comprehensive. Many of Kingston's design standards and guidelines have been cited as guides for future growth for other Hudson River communities by Scenic Hudson. Scenic Hudson used the Rondout Area as a case study of how to protect maritime character, preserve historic architecture and enhance waterfront connections in its *Revitalizing Hudson Riverfronts* in 2010. Overall, Kingston's design standards and guidelines are intended to protect historic and natural assets while encouraging appropriate redevelopment. Some key standards already adopted include requirements to:

- · Protect scenic quality, water quality and views;
- Preserve existing landscapes, trees and vegetation;
- · Protect historic facades and encourage adaptive reuse of historic structures;
- Create mixed-use, mixed-income, walkable neighborhoods;
- Cluster and orient buildings to preserve open space;
- Emphasize pedestrian connections and buffer parking areas;
- Provide public access and a continuous riverfront esplanade;
- · Give priority to water-related and water-dependent uses;
- Design new construction to be compatible with existing buildings in scale, form, materials, color, and height;
- Encourage affordable housing.

This section of the Kingston Waterfront BOA Implementation Strategy builds on the design standards and guidelines already in place and recommends updates where needed to implement the BOA plan. It begins with a summary of the existing standards, guidelines and other regulations, including both adopted local laws and other standards. Since considerable analysis and community consensus have been completed by the City of Kingston after the existing design standards and guidelines were originally adopted, the second part of this section reviews more recent studies and plans that contain recommendations affecting the design standards and guidelines in the BOA. The third part of this section evaluates those existing standards and guidelines in light of the recent studies. The section concludes with recommendations for updates to realize the BOA design. The timeline (Figure 07.68) summarizes the wide variety of documents, regulations and studies relevant to the design standards and guidelines for the Kingston Waterfront BOA and plots them chronologically in time from 1961 through 2015. It is grouped by; policy documents, regulations & zoning, BOA steps, approved plans, and recent studies & task forces with recommendations for design standards or guidelines. These efforts are shown with bars, which are extended to indicate when they are continuing or are still in effect. Specific dates when policies and regulations were adopted or plans and studies completed are shown with stars and diamonds. The Timeline also shows relevant efforts that are already in progress or planned for the immediate future.

Year	Description	Pre-1990	1990	1001	1992	1993	1994	1995	1996	1997	1998 1999	2000	2001	2002	2003	2004 2005	2006	2007	2008	2009	2010	2012	2013	2014 2015	Post-2015
POLICY D	OCUMENTS (Comprehensive Plan, Urban Cultural Park/Heritage Area & LWRP)																								
1961	Kingston Comprehensive Plan																								
1987	Kingston Urban Cultural Park Draft Management Plan (including Performance Standards)																								
1992	Kingston Local Waterfront Revitalization Program (LWRP)																								
1999	NYS Heritage Cultural Park Designation & Planning (now Heritage Area)													-											
2001-02	Kingston Waterfront Development Implementation Plan (LWRPIP)												•												
2011-15	Kingston Comprehensive Plan "Kingston 2025" (draft only)																								
2016	Future LWRP Update		_																	+					
REGULAT	IONS & ZONING																								
1987	Flood Hazard Overlay District																								
1992	Development Incentives for RF-R and RF-H (including Siting and Facility Guidelines)		1			•																			
2005	RF-R District Development Standards		1												-										
2005	Mixed-Use Overlay Zoning District															5									
2008	Broadway Overlay District Design Standards															-									
2016	Future Zoning Revisions																				_				
BOA STE																									
1992-02	Kingston Waterfront BOA Pre-Nomination Study (Step 1)	1		_									(
2002	Marine Infrastructure Assessment	+	+		-								-	ŏ	-								_		T
2002-03	Mid-Hudson Land Revitalization Environmental Site Characterization		+									+		-	0										
2008-11	Kingston Waterfront BOA Step 2 & Environmental Site Assessments	1													<u> </u>						C)			
2014-16	Kingston Waterfront BOA Step 3, Economics Analysis & FGEIS																								
	D DIANS (with design standards or guidelines)																								
1996-03	Hudson Landing (AVR) & EGEIS (including Regulating Design Manual)	+	-		_	_																			
2013	Park & Recreation Master Plan (including Service Standards)		+					_												-					+
2013-14	Rondout Harbor Management Plan	+	+																	+					-
																							_		
RECENT	STUDIES & TASK FORCES (with recommendations for design standards or guidelines)	_																			_				
2010	Scenic Hudson "Revitalizing Hudson River Waterfronts"																					-			
2012	Kingston Climate Action Plan																			\perp			-		
2013	Kingston Tidal Flooding Task Force "Planning for Rising Waters"																								
FIGURE	07.68 Timeline of documents, regulations and studies relevant	to (des	sig	n s	tar	nda	ards	ar	nd						Ad	ор	tec							
guidelir	nes for BOA															Со	m	plet	ed						
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In progress

SUMMARY OF EXISTING STANDARDS AND GUIDELINES FOR BOA

Background of Design Standards and Guidelines – Definitions

Before summarizing the existing standards and guidelines that apply to the BOA, it is important to place them within the context of other land use techniques that can be employed for implementation of the BOA design. Several of these have been addressed above in earlier sections of the Implementation Strategy.

Zoning - Zoning shapes a municipality by establishing zoning districts and setting forth legal regulations affecting the way land may be used and developed within them. Zoning can govern the size of a building relative to its zoning lot (by defining allowable maximum square footages, lot coverage, required open space, density, and bulk), the distance between a building and its lot lines, parking and other physical elements.

Design Standards and Guidelines – Design standards and guidelines are detailed requirements that work within a regulatory environment of local land use controls and address what those controls do not cover. For example, they go beyond zoning regulations, but work within the allowable "zoning envelope," establishing a level of quality and character for future development. Design standards and guidelines should be informed by a local vision established by a Comprehensive Plan and other policy documents and respond to the local context and environment. Effective standards and guidelines contribute to enhancing the value of individual properties and public spaces. They also protect investments by the public, existing owners and new developers over time.

Design Standards - Design standards are a tool to control the quality and functionality of the public realm, which comprises the entire area of non-private lands and open spaces. Elements of the public realm include the sidewalk, curb, street, and other public territory. While zoning regulations control development on private property, design standards may specify the components and character of the space in the areas adjacent to and between private properties. Design standards are requirements, they are not just advisory, and can be specified even to the level of detail shown in engineering drawings.

Design Guidelines – Design guidelines, by contrast, are a tool to ensure the compatibility of new development with the existing historic, community and natural character of an area, and are applied to private property development. Unlike design standards, design guidelines specify aesthetic or appearance outcomes of private development with varying degrees of detail and opportunity for interpretation based on the intent stated in the language, graphics and illustrations.

Other Planning Components – Depending on the type of planning effort, additional planning components may include:

- 1 A master site plan setting forth a design approach and layout of open spaces, circulation, streets, blocks, and private lots for an area whose development is intended to be completed as a cohesive project;
- 2 A street map establishing the legal boundaries of public streets and parkland;
- **3** Infrastructure plans delineating the utilities necessary to support the master plan or desired development.

Adopted Local Law from City of Kingston Codes

Three key local laws from the City of Kingston's zoning codes contain the design standards and guidelines governing Kingston's Waterfront BOA. They are described in more detail below appearing in the order in which they were adopted. In addition, there are two types of overlay districts that offer potentially valuable tools for implementing the BOA.

1. Flood Hazard Overlay District (1987)

City of Kingston Zoning Ordinance, Chapter 405. Zoning, Article IV, Subsection #405-26

The Flood Hazard Overlay District, which is applied on top of a base zoning district. controls much of the development occurring within the BOA and its Strategic Site parcels. Its purpose is to protect human life, health and safety, minimize public and private losses from flooding, and ensure qualification for FEMA's National Flood Insurance Program (NFIP). To accomplish these purposes it regulates uses within the district; requires that uses vulnerable to floods be protected at the time of initial construction, controls alteration of natural floodplains, channels and natural protective barriers such as wetlands, controls filling, grading and dredging, and regulates construction of flood barriers. (Figure 07.69)

When flooding occurs, it comes at a high price to the public. The text of the overlay district notes that public expenditures for flooding include costly flood control projects, rescue and relief efforts, damage to public facilities and utilities, and operational interruptions that erode the tax base. Given that, the standards contained in this overlay are highly detailed. The general standards include anchoring structures to prevent movement or flotation, flood-resistant construction materials



FIGURE 07.69 Flood Hazards on the East Strand, 2015

and methods, water-proofing of utilities, and adequate drainage. Specific standards are also provided for residential and non-residential construction and utilities, such as elevating the lowest floor above base flood elevation, prohibition of encroachments on floodways, and certification of hydrostatic strength of all structural components. The Fire Officer of Kingston, through the city's building safety function, is charged with administration, inspection and certifying compliance.

Several different zoning designations will be discussed in the following sections, those zoning districts are:

- RF-R (Rondout Creek District)
- RF-H (Hudson Riverfront District).
- RRR (residential district)
- M-2 (General Manufacturing), and
- C-2 (General Commercial).

2. Development Incentives for the RF-R Rondout Creek District and RF-H Hudson Riverfront District – Siting and Facility-Related Guidelines (1992)

City of Kingston Zoning Ordinance, Chapter 405. Zoning,

Articles IV and V, District Regulations and Supplementary Regulations, Subsections #405-25 and #405-31

Most of the land within the BOA and all of its Strategic Sites fall under the RF-R Roundout Creek and RF-H Hudson Riverfront Districts. A small number of BOA parcels are within the C-2, M-2 and RRR districts. (See the Regulatory Law Analysis section for additional information on zoning.) Permitted land uses, development standards, and approval processes apply to any proposed development under current regulations. Assumptions made about applicability of existing design standards and guidelines are based on existing zoning.

The development incentives adopted in this 1992 zoning law permit increases in the allowable floor area ratio (FAR) and/or building height in return for providing public benefits such as waterfront access and affordable housing. The zoning law also offers funding for key projects such as the Maritime Museum and other undefined redevelopment projects in Ponckhockie, and covers potential financing via tax abatements and a revolving loan fund.

The design guidelines included in this zoning law concern siting and facilities and are intended to respect the unique character of the existing area and protect the scenic qualities of the city's waterfronts on the Rondout Creek and Hudson River. They cover protection of the shoreline, clustering and orientation of buildings, adaptive reuse, architectural scale, form and materials, the Mid-Hudson River vegetative corridor, compatibility with neighboring properties, scenic landscapes, parking areas, visual buffers, and avoiding monotony of design.

The design regulations contained in this 1992 zoning text for the RF-R and RF-H districts were a direct result of the 1992 adoption of the City's Local Waterfront Revitalization Program (LWRP), which gives priority to water-dependent and water-enhanced uses. The implementation of the LWRP's policies was used as an incentive to develop planning tools for the waterfront:

Waterfront Design Plan – "A Waterfront Design Plan should be produced to provide a physical plan and detailed design standards for waterfront redevelopment, following the policies and goals set forth in the Local Waterfront Revitalization Program."

(LWRP, Section V., B. 1. c., "Waterfront Design Plan," on page V-8)

3. RF-R District Development Standards (2005)

City of Kingston Zoning Ordinance, Chapter 405. Zoning, Article V, Supplementary Regulations, Subsections #405-3.1

Unique conditions in the City of Kingston make the adoption of design-sensitive regulations particularly appropriate for the Rondout Creek area. One important step was the consolidation of oil terminals from multiple sites along Rondout Creek into one major site on the Hudson River. This private initiative rationalized industrial land uses, whose previous and dissipated presence on the Rondout Creek waterfront was an obstacle to the redevelopment anticipated by the LWRP and other later policies. Another unique condition is the City of Kingston's extensive inventory of historic building stock, forcing new construction to be sensitive to the local context and to the legacy of the design and character of the city's urban fabric. The Rondout, for example, flourished in the 19th century when it was the terminus of the Delaware and Hudson Canal.

However, the more generalized policy statements of the 1992 LWRP proved to be insufficient to sharpen the intent of the Rondout's design-sensitive setting. The LWRP Implementation Plan (LWRPIP) in 2002 went on to recommend Waterfront Design Standards as a catalyst for redevelopment along with new mixed-use development, relocation of non-conforming uses and clustering of cultural facilities.

In 2005, the City of Kingston adopted additional provisions relating to development in the RF-R district that prescribed detailed development standards as a tool for developers and planners with the intent of streamlining the design review process. These development standards spell out precise specifications for development to protect existing historical assets along the Rondout Creek. Among other elements, these standards cover: site planning and landscaping standards, clustered development, building height and scale, as well as building materials.

While the 1992 RF-R zoning provided incentives for waterfront access, the 2005 standards specifically require a continuous pedestrian esplanade on all new development with water frontage along the Rondout Creek and specifies its hours of operation, signage, spacing of trees, benches, lights, and ADA access. In addition, the Development Standards set forth requirements for site plan review.

4. Mixed Use Overlay Zoning District (MU) (2005)

City of Kingston Zoning Ordinance, Chapter 405. Zoning, Article IV, District Regulations, Subsection #405-27.1

The Mixed Use Overlay zoning district helps promote development in areas, like the Rondout, with existing infrastructure. By allowing adaptive reuse of industrial and commercial buildings for rental housing, it encourages infill development. At the same time this Overlay supports vibrant mixed-use, pedestrian-friendly, mixedincome neighborhoods with guidelines for affordable housing and standards for streetscapes. While not currently mapped for the BOA, the Overlay is an important tool in the city's repertoire of guidelines that may be useful for the BOA.

In 2004, Kingston's Common Council considered adoption of this Mixed Use Overlay District and an amendment to the Comprehensive Plan. Both were designed to allow for adaptive reuse of industrial and commercial buildings for rental housing, including affordable units, due to rapidly rising housing costs. The findings of the Comprehensive Plan's Environmental Impact Statement (EIS) (2005) identifies adverse impacts, in the community character section, for housing, neighborhoods and historic resources if the integrity of existing buildings and streetscapes are altered by inappropriate design, materials, and construction. To mitigate those adverse impacts, the EIS recommended Design Guidelines. These recommended Design Guidelines have not been adopted; however, the Mixed Use Overlay District that was adopted includes development standards that are supported with intent language and eight development standards that recognize the safety, comfort and interest of pedestrians as it relates to the extent to which buildings face streets and public open spaces with entrances, windows and usable outdoor space.

The eight development standards are:

- Street level building spaces shall be limited to commercial activities with residential spaces allowed at the second or above floors.
- Primary entrances of buildings shall face a street or small park.
- Sheltering elements shall be included as part of the adaptive reuse site plans.

- Shade trees shall be essential features of adaptive reuse site plans.
- Human-scale lighting shall be essential features of adaptive reuse site plans.
- Small parks should be encouraged as part of the adaptive reuse site plans.
- Reinforce pedestrian connections between buildings and the street, between buildings and through parking lots as part of the adaptive reuse plans.
- Minimize the dominance of parking, screen parking lots from the street and make parking lots cooler as part of the adaptive reuse site plans.

Primarily developed to encourage affordable housing opportunities in under-used mill buildings, and to promote redevelopment while enabling pedestrian-based vibrancy, the Mixed Use Overlay is more of a land use tool than a design standard or guideline. Given the legacy of mill buildings in and around residential districts that became activated, several measures were developed to mitigate land use conflicts. These are also useful for the BOA.

5. Broadway Overlay District Design Standards (2008)

City of Kingston Zoning Ordinance, Chapter 405. Zoning, Article V, Supplementary Regulations, Subsections #405-31.2 and Local Law #4

The Broadway Overlay District Design Standards affects Broadway parcels and extends from the intersection of Clinton Avenue and Albany Avenue to Broadway and McEntee Street. In addition to extensive illustrations prescribing design guidelines and examples of applying those guidelines to signage, façade and other construction in the Broadway Overlay District, its design standards contain specific procedural requirements, standards to apply, waivers and other provisions in this part of the zoning code. Submittal requirements and opportunities for exceptions to the requirements are all described. (Figure 07.70)



FIGURE 07.70 Design standards for upper Broadway could be extended to the Rondout, 2015

There is evidence of the success of using the Broadway Overlay portion of the code. While it is not currently mapped in the BOA, the Draft Comprehensive Plan recommends that it be extended further to the Rondout from its current eastern boundary all the way to Broadway's southern terminus in the BOA:

From the Comprehensive Plan:

"Protect the existing character of the neighborhood, Strategy 10.5.1: Borrow and extend Broadway Overlay District Design Standards. The existing design standards for Broadway provide a good basis upon which to regulate buildings in the Rondout

and insure that new structures fit into the fabric of the neighborhood."

There is agreement among many with experience in Kingston that the Mixed Use and Broadway Overlay Districts succeed in promoting quality redevelopment.

Other Standards

In addition to the adopted City of Kingston Zoning Ordinance, other design standards can be found in a variety of adopted policy documents described below in chronological order, including where the LWRPIP mentions that the value of design standards bolsters any future design standards or guidelines that are adopted as a part of the zoning code.

1. Kingston Local Waterfront Revitalization Program (LWRP) (1992) and Waterfront Development Implementation Plan (LWRPIP) (2002)

The Local Waterfront Development Program (LWRP) adopted in 1992 and its implementation plan, entitled Waterfront Development Implementation Plan (LWRPIP), adopted ten years later in 2002, are the most important and direct source for the zoning ordinances governing the BOA design standards and guidelines, as well as providing direction and a policy basis for all future planning for the BOA area. Together they give priority to water-dependent and water–enhanced uses, create distinctive riverfront districts, control waterfront development, and protect public access and views to Kingston's rivers. The LWRP is a comprehensive analysis and forecast of the community's needs and expectations for redevelopment of the waterfront. In addition, it lays out implementation and administrative processes to realize the plan. The 1992 LWRP also provided the necessary foundation for the Urban Cultural Park Plan, which is discussed below.

GOALS:

In addition to forming the policy basis for all waterfront planning in Kingston, the 1992 LWRP proposed 14 goals and projects to enhance and encourage development on the waterfront. Of those 14 goals below is a discussion of two goals that relate directly to this analysis and provide recommendations on updates to design standards and guidelines for the BOA:

"Goal 3: Enhance public access to the waterfront"

The City of Kingston has committed to providing comprehensive public access to the Rondout Creek and Hudson River waterfronts. The plan proposes a waterfront esplanade that would provide pedestrian and bicycle access from Block Park to Kingston Point Park and recommends that the access be extended northwards along the shore of the Hudson River. The Implementation Plan recommends view corridor protections and access point provisions to ensure that new development encourages access to the water. Substantial park enhancements offer increased waterfront access.

"Goal 5: Ensure that the design of new development is consistent with natural and historical character"

The Kingston waterfront's rich architectural history and natural resources are among its strongest assets. Kingston's Rondout and Hudson River waterfronts are New York State designated Significant Habitat Areas. The waterfront plan recommends a specific set of design standards to ensure that future development protects and enhances these environmental and historic resources.

These two goals clearly express the highest priority of waterfront access from one public park on the west to one public park on the east. The importance of natural and historical character is another equally important goal. Following the LWRPIP's list of goals, it describes "Structuring a Development Alternative" and lists ten "Assumptions" and seven "Givens."

Among the so-called "givens" for structuring a development alternative, two are related to design standards and guidelines for the BOA:

- 1 "There will be public access along the waterfront in a riverfront trail."
- 2 "The waterfront will be developed to maximize multi-modal access, with high-quality pedestrian connections."

Following the LWRPIP's "Structuring a Development Alternative," there is a section called "Proposed Land Uses," and then "Waterfront-Wide Improvements" two of which relate to design standards and guidelines for the BOA:

1. Design Standards

"The City will develop a set of design standards to guide future development and rehabilitation of buildings on the waterfront. These standards will help the City to direct the way the waterfront develops and ensure that it becomes an active and vibrant regional destination. The standards will also allow the City, the community, and developers to work more effectively as new projects are proposed throughout the study area."

2. Public Access

"Public access will be provided along the waterfront through a riverfront trail. The trail, which may deviate from the shoreline in some locations, will offer pedestrian access around Island Dock to its connection to Block Park, and then eastward along West Strand Street through West Strand Park. From there it will continue along the shoreline to the tip of Kingston Landing. At Kingston Landing it will split into two trails, one to go around the west side of Kingston Point Park continuing around the park to the current Rotary Park entrance. The other leg of the trail will follow the trolley tracks to the former Dayliner dock and the bridge connecting into Kingston Point Park."

This very specific prescription is spelled out in various ways throughout the zoning code.

CATALYST PROJECT – WATERFRONT DESIGN STANDARDS:

The LWRPIP recommends three catalyst projects, one of which is the adoption of Waterfront Design Standards. In an appendix, the LWRPIP includes a memorandum from design consultants (Appendix E, Design Standards Recommendations, November 20, 2002, Memo from Marian Hull) which outlines these recommended design standards for the Rondout waterfront including some model language. The recommendations are an elaboration by subject area of purposes sought in developing future design standards. The memorandum also references performance standards that are established in the Urban Cultural Park Plan, discussed below.

The structure of this memo's recommendations (Land and Water; Bulk, Scale and

Form; Façade Composition, Building Materials and Colors; Environmental Quality' Circulation and Access; and Management and Development) comprise some important categories for design standards and guidelines. They differ from those adopted in the City's code, but the adopted zoning largely fulfills their intent.

2. Urban Cultural Park Management Plan (1987) and NYS Heritage Cultural Park Designation & Planning (1999)

Kingston's Urban Cultural Park (UCP) Management Plan is one of several resulting from a law directing the State Office of Parks, Recreation and Historic Preservation to write a state-wide 'Plan for the New York Urban Cultural Park System' (1981), which then directed that a feasibility study be prepared for consideration of designation in Kingston. The UCP plans were viewed as innovative state programs that help communities make better use of their public and historic resources. These resources are often located within declining historic buildings and districts in the heart of older industrial cities. The plans can serve to interpret the heritage of New York State, while supporting the UCP in becoming a regional center of economic and cultural development through a well-defined and realistic redevelopment process.

(Source: Letter from Office of Parks, Recreation and Historic Preservation Commissioner Orin Lehman, to the New York State Legislature, 1981)

The New York State Urban Cultural Park system is designed to be a partnership with coordination and consistency between the State with its various functions; such as transportation, environmental conservation, housing, community renewal, and economic development; and locally created urban cultural parks that are designated by the State Legislature and have successfully completed a management plan approved by the State Office of Parks, Recreation and Historic Preservation. The park system law establishes an Advisory Council to help connect the Urban Cultural Parks with state agencies. The New York State Legislature changed the name from "urban cultural park" to "heritage area" when regional additions were made to the system. Today the state heritage area system is made up of twenty state designated heritages areas that include both urban settings and regional areas.

Since designation, the Kingston UCP has spawned interest and investment, with increases in visitation of the Rondout and coordination for programming that benefits the tourism sector of the Kingston economy.

ROLE IN PLANNING:

The Heritage Area is managed by the City of Kingston with certain authority and powers retained by the state. The Heritage Area is a joint venture of the State and the City of Kingston. The Heritage Area Commission performs management functions.

Applicability to Design Standards:

The plan describes the regulatory and review role of the Commission is "to preserve and protect resources within the Park boundary which are of special significance to the Park. Specific examples of this role include matters related to land use and preservation and design of buildings and improvements." In practice, the Commission reviews all development proposals within the Rondout, as it is also designated to review projects for consistency with the policies of the LWRP.

The plan contains programs for park improvements and use which call for certain standards for landscaping and streetscapes, signage, and façade improvements.

These standards regulate Landscape and Streetscape; Signage; and, a Façade Program. Illustrations including dimensional requirements as well as detailed standards by sub-zone of the Heritage Area can be used as an informational tool for decision-making.

As the plan's adoption date precedes that of the City's Design Standards and Guidelines, the plan's recommendations for design guidelines governing streetscape, landscaping, signage, and façades can be viewed as policy recommendations that were put into consideration in anticipation of the adopted regulations.

PERFORMANCE STANDARDS:

In addition to design standards, the plan describes a set of performance standards that are intended to measure the success of meeting a set of objectives that are derived from both plans as well as community specific goals. The goals themselves are derived from four statewide goals: preservation, education, recreation, and economic development. While these performance standards are not regulatory in nature, they are, instead, more of a list of action items whose accomplishment can be tracked. Their presence in the plan and their derivation from statewide objectives indicates an important priority which updates to design standards and guidelines for the BOA should attempt to further accomplish.

3. Hudson Landing Regulating Design Manual (2003)

The private, large-scale Hudson Landing development spans across both Kingston and the adjacent Town of Ulster along the Hudson River on a former cement factory and mine site. As part of Hudson Landing's approval process, it was agreed that the developers would provide a Hudson Landing Regulating Design Manual. The comprehensive and highly detailed Manual includes planning, architectural, and landscape guidelines as well as provisions for their administration and implementation. The Manual prescribes a wide range of regulations covering uses, heights, roadways, open spaces, signage, awnings, storefront lighting, architectural styles, building types, massing, design elements and aesthetic characteristics, as well as treatment of the landscape and plant selection. The important factors of the adopted Manual for the BOA are its applicability to a master planned development and identification of a review and appeal process.

4. Parks and Recreation Master Plan – Service Standards (2013)

The City of Kingston's first Parks and Recreation Master Plan was adopted in 2013. It relates to and ties into the City's LWRP, resulting LWRPIP and the Heritage Area in the sense that it "builds on the success of prior plans and actions...meshes with other city physical and economic plans and programs" (Page 3 of the Parks and Recreation Master Plan).

ROLE IN PLANNING:

This Plan was completed during the beginning of the City's current process of updating its Comprehensive Plan. It is "intended to complement that broader... plan program...it is suggested to incorporate this plan [the Comprehensive Plan] within it by reference" (Page 4 of the Parks and Recreation Master Plan). Since the Comprehensive Plan has yet to be adopted, the Parks and Recreation plan stands alone at the time of publication. However, if it is intended to be incorporated into the Comprehensive Plan, the plan can be viewed much as a Comprehensive Plan, with

goals, objectives, and strategies whose implementation will occur through the zoning code, a capital plan, and other tools.

APPLICABILITY:

The applicability of the Plan's objectives to updates for the BOA design standards and guidelines are identified throughout the Parks and Recreation Master Plan document in terms of individual parks and facilities.

Kingston Point Beach - This 10.6-acre municipal beach and park contains few structures, and most of the park is used for passive recreation. However, vehicle parking and access are identified as an issue, with inadequate pedestrian access and possibly inadequate quantity of parking should the large vacant land holdings adjacent to the north be developed. The pressures added on this park with new large-scale development would require close attention to detailed standards. Ongoing issues even without additional development nearby are swimming health, dog waste, and interpretive signage, along with risks to its access and usage with sea level rise and storm events. The Plan suggests that development next door would be a leverage opportunity for some of these standards to be put in place, and for extension of the Hudson River Greenway to address flood hazards.

Kingston Point/Rotary Park - The 87.4-acre park plan, extensively restored and upgraded by the Rotary organization, calls for additional upgrades and facility improvements, many of which originated in the LWRP. As such, they are recorded and reflect prior community consensus for consideration. The increase in use of the park would also result from completion of a rail trail. Some of the upgrades contemplate waterside activities, including a ferry landing and non-motorized watercraft access.

T.R. Gallo Waterfront Park/Rondout Landing Dock - This 1.36-acre park, landing, parking area and linear walkway, is well used, but the Plan suggests the addition of wayfinding signage. To increase the utility of the waterfront location, the Plan suggests an area be set aside for recreation services and supply, boat rentals, boat put-ins, and bike rentals. Metered parking is suggested to increase revenue. There is an observation of some businesses encroaching past their allowed areas of the sidewalk.

Rondout Lighthouse - The primary issue for the lighthouse is access. This issue is discussed in the LWRP and US Army Corps of Engineers' Rondout Harbor Management Plan, and is raised in this plan again. The plan specifically suggests adapting part of the unused portion of North Street for the beginning of a walkway to the lighthouse.

OPEN SPACE PLANNING:

Most of the plan's analysis on open space plans is in conjunction with greenway planning. However, an important objective is that the Conservation Advisory Council write an open space plan. The plan also emphasizes that open space can be publicly or privately owned. For updates to the BOA design standards and guidelines, the importance of this section is its call for the creation of an inventory of open space assets.

LAND USE LAWS & REGULATION:

The plan suggests that zoning be evaluated for how well it is improving aesthetics

around parks, and how effectively it is achieving distinctive streets and creating plazas. The plan recommends examining standards for open space.

SIDEWALK ENCROACHMENTS:

The Plan suggests that a clear process and a set of standards be established for reviewing commercial (usually dining) uses adjacent to sidewalks to promote quality sidewalk dining, but also to protect pedestrian access and mobility and to retain public waterfront access.

OPEN SPACE DESIGN:

The plan suggests that the Conservation Advisory Council complete its work on conservation guidelines. Such guidelines can protect site features and other unique characteristics of a specific property, as they affect open space. This work should inform the creation of an Open Space Design permitting process. It notes that such standards are density-neutral, and provides flexibility for the arrangement of building sites or parcels. These standards can be then be used to provide flexibility for minimum lot sizes in exchange for dedicated open space.

INCENTIVE ZONING:

The plan recommends that the zoning code include options for density increases in exchange for dedicated open space. The plan recommends that the base densities be lowered so that increases can be leveraged for open space. It also recommends that recreation fees be considered for non-residential developments as a further tool to expand options for the creation or operation of open space. While the specifics of these recommendations are not currently adopted, the principle of incentive zoning for the Rondout is contained in the adopted Zoning Ordinance and its subsections on design standards and guidelines.

SUMMARY OF RECOMMENDATIONS OF PRIOR STUDIES THAT AFFECT DESIGN STANDARDS AND GUIDELINES FOR BOA

Considerable work has taken place in Kingston since the adoption of the existing design standards and guidelines. These efforts have included community input and consensus. Particularly relevant to the design standards and guidelines for the BOA, is that there have been three studies; a regional guide to Hudson riverfront revitalization, a city-wide action plan to address climate change, and a task force on flooding in Kingston post-Hurricanes Irene and Sandy. Their recommendations that affect the design standards and guidelines for the BOA are summarized in the next section and are in chronological order. In addition, there are current planning projects underway that will impact the design standards and guidelines for the BOA. Those include a major update of the city's Comprehensive Plan and a Harbor Management Plan for the Rondout Creek.

Studies and Task Forces

1. Scenic Hudson, "Revitalizing Hudson Riverfronts" (2010)

"Revitalizing Hudson Riverfronts" released by Scenic Hudson in 2010 offers a set of principles to ensure that the Hudson Valley's beauty, rich history, and abundant natural resources will be protected in the future. The principles support a regional vision to direct new growth towards Hudson River cities with existing transportation and other infrastructure, while preserving the area's open spaces for farming, habitat and recreation. Recommendations regarding adaptation to the effects of sea level rise are featured. As mentioned earlier, some of the adopted measures in the City of Kingston relating to design standards and guidelines for the Rondout are showcased in "Revitalizing Hudson Riverfronts" as models for other municipalities. The document also follows and is based on much of the City's work leading up to the writing of the BOA plan itself.

Many of the principals put forward in this study are already incorporated in one way or another in the design standards and guidelines for the BOA. While the rationale for design standards and guidelines is provided and the City has adopted measures, the document contains other specific recommendations that are not contained in adopted regulations. Two in particular stand out. 1) For waterside design standards, the report recommends creating "watertrails" or "blueways" (Page 40 of Revitalizing Hudson Riverfronts). The creation of on-water routes affects some considerations for waterside access, but also has implications for the change in the location of the shore's edge with sea-level rise and storm surges. 2) As an administrative and procedural recommendation, this report's recommendation is that an Architectural Review Board (ARB) be considered (Page 83 of Revitalizing Hudson Riverfronts). Both of these topics are discussed in more detail below and have been included in the recommendations for updates to Kingston's design standards and guidelines for the BOA.

Scenic Hudson authored "Revitalizing Hudson Riverfronts" with grant assistance from the New York State Department of State Office of Coastal, Local Government and Community Sustainability. The City of Kingston administered the grant and members of the community as well as others active in these issues in the Hudson Valley were part of an advisory group.

2. City of Kingston Climate Action Plan (2012)

The City of Kingston's "Climate Action Plan: 2010 Community-Wide & Local Government Operations Energy and Greenhouse Gas Emissions Inventory" (CAP) is a comprehensive audit of municipal consumption and waste generation using the ICLEI-Local Governments for Sustainability (formerly International Council for Local Environmental Initiatives) model. The CAP quantifies overall greenhouse gas output, recommends measures for reduction, and calls for an integration of planning and goal-setting across a wide spectrum of operational, policy, and regulatory practices. Across this wide-ranging plan there are some measures that are relevant to these updates to the design standards and guidelines for the BOA.

Most importantly, the CAP calls for: "As part of Comprehensive Master Plan and Zoning Code Update adopt goals and policies that promote a compact, transitoriented, bikeable and walkable community; promote infill development; prohibit new development in floodplains and preserve and protect open space, biodiversity, and water supplies." (Page vi of the CAP). This CAP recommendation, though general, applies to the design standards and guidelines updates by recognizing the overriding role of a recent, concise Comprehensive Plan and its implementing Zoning Code. Updates to the City's design standards and guidelines are a part of the zoning code, and can only be effective if they are based on the Comprehensive Plan.

The CAP's recommendations that directly relate to updates of the design standards and guidelines for the BOA can be found in Section IV; Recommendations for Updates to Design Standards and Guidelines for BOA.

3. Tidal Flooding Task Force, "Planning for Rising Waters" (2013)

The Tidal Waterfront Flooding Task Force was appointed by the Mayor in 2012 and charged with evaluating Kingston's vulnerability to flooding, storm surge, and sea level rise along both the Hudson and Rondout riverfronts. Scenic Hudson spearheaded this collaborative public planning process to help the community design strategies to increase their resilience, protect life and the natural environment, and strengthen economic development.

The resulting report, "Planning for Rising Waters," presents 24 general recommendations for the City and many more detailed, site-specific ones for riverfront neighborhoods. Within the BOA, the Task Force sets forth recommendations for West Abeel, Sass/Block Parks, Island Dock, The West and East Strand, Ponckhockie, Rondout Lighthouse, North Street, and Kingston Point Park.

The Task Force's recommendations that directly relate to updates to the design standards and guidelines for the BOA can be found in Section IV; Recommendations for Updates to Design Standards and Guidelines for BOA.

Current Planning Projects

1. City of Kingston Comprehensive Plan, "Kingston 2025"

The City's draft Comprehensive Plan is at an intermediate stage of development. The draft plan's stated Goals, Objectives, and Strategies appear to be close to final form, at a high level of detail and clearly capture careful data collection, consultation with the community, and review by City staff. The expert advice found in the plan provides a pathway for implementation through actions that also reach across the City's recent planning efforts.

Direct reference in the draft Comprehensive Plan to adoption of the "Kingston Climate Action Plan" (CAP) and "Planning for Rising Waters" indicates the city's intentions to fully integrate all long-term planning analysis. The draft Comprehensive Plan also mentions the commencement of the BOA Step 3 plan (see below), but does not yet integrate the draft BOA Plan's proposed actions into its body or adopt the goals and strategies of the planning efforts and studies as it does with the CAP and "Planning for Rising Waters," which have already been completed. The draft Comprehensive Plan's reference to the BOA plan, however, provides a solid policy basis for any of its proposed zoning changes in the future.

However, the Comprehensive Plan is in draft, and does not yet represent the final consensus of the community. In terms of the draft Comprehensive Plan's obligations under SEQRA, it states that the Comprehensive Plan itself will be a Generic Environmental Impact Statement (GEIS) (City of Kingston Draft Comprehensive Plan, page 5). Therefore, any proposed changes to zoning will either be measured, and their impacts and mitigations considered, within the draft or final Comprehensive Plan, unless some other requirement or interpretation of SEQRA will alter how environmental review is completed. In either case, the BOA Plan's recommendations for updates to the design standards and guidelines are not available at this time nor are they not anticipated to be explicitly integrated into the draft Comprehensive Plan.

For the purposes of documenting consistency between the draft Comprehensive Plan and this BOA, the draft Comprehensive Plan states:

"Also following the adoption of the Vision, the City Community Development Agency has selected consultants to prepare its Phase 3 Brownfield Opportunity Area Plan. This Plan will likely contain relevant land use recommendations that will need to be considered in future plan updates" (City of Kingston Draft Comprehensive Plan, page 4)

Therefore, any zoning changes proposed as a part of the final Comprehensive Plan that implement its strategies (usually generated through policy objectives and a map of "generalized land uses," which does appear in the draft Comprehensive Plan), that are recommended as a part of the proposed BOA plan are not present in the draft Comprehensive Plan at this intermediate stage of its development, though they are anticipated to be addressed in a later plan update.

However, the structure of the draft Comprehensive Plan in proposing zoning changes and its identification of land use elements leaves open the possibility for the BOA Plan's recommendations for updates to the design standards and guidelines to be integrated into any other proposed zoning changes contained in the draft or final Comprehensive Plan. The draft Comprehensive Plan could refer to the BOA's recommendations for updates for design standards and guidelines as a part of the overall package of city-wide zoning changes. Such a reference would reinforce the importance of recommendations for updates to the design standards and guidelines for the BOA. In either case, the draft Comprehensive Plan's mention of the BOA plan tightens the relationship between the two planning documents, and solidifies the policy basis for any proposed zoning changes in the future.

The elements that are most important related to design standards and guidelines are listed below with comments as to their relevance.
DRAFT COMPREHENSIVE PLAN RECOMMENDATIONS: TIDAL FLOODING TASK FORCE

By restating and categorizing recommendations of the Tidal Flooding Task Force report (Page 10 of the Draft Comprehensive Plan), the Draft Comprehensive Plan clearly indicates the importance of climate change considerations to any future land uses. Such attention to climate change means that recommendations for updates to the design standards and guidelines in the BOA are supported by extensive City efforts elsewhere.

Among these, in particular is the recommendation to guarantee open space over the long term (City of Kingston Draft Comprehensive Plan, page 10). While provisions in the code for incentive zoning in the RF-R and RF-H districts exchanging increased height or FAR for public access to the waterfront over the long term are already in place, underscoring the permanence of access to open space indicates the priority of this recommendation.

DRAFT COMPREHENSIVE PLAN RECOMMENDATIONS: ECONOMIC DEVELOPMENT

One important recommendation is to streamline the development review process (City of Kingston Draft Comprehensive Plan, page 36). While the rationale for this recommendation is more universally concerned with economic development, it does support the recommendations of updates to the design strategies and guidelines related to procedure and administration which are discussed below. One recommendation, to create a Zoning Handbook (City of Kingston Draft Comprehensive Plan, page 36) is related to the next recommendation for the creation of a design standards and guidelines handbook or manual for the BOA.

DRAFT COMPREHENSIVE PLAN RECOMMENDATIONS: LAND USE

The plan describes obstacles to timely land use approvals. Recommendations related to eliminating "redundant" or overlapping review periods may pose a threat of loss of state funding for the Urban Heritage Area, and may therefore not have consensus for a final version of the plan. The disadvantages to some of the Comprehensive Plan's recommendations are described in the recommendations for updates to design standards and guidelines for the BOA.

DRAFT COMPREHENSIVE PLAN RECOMMENDATIONS: UPTOWN - DESIGN STANDARDS

While the plan's recommendations for more specific design standards for the Uptown Core area, containing the historic Stockade District, would apply outside the Rondout waterfront area, these recommendations can support the recommendations for updates for design standards and guidelines in the BOA as well.

DRAFT COMPREHENSIVE PLAN RECOMMENDATIONS: RONDOUT

Specific recommendations for the Rondout relate directly to updates to design standards and guidelines for the BOA. The Plan recommends that structures in flood-prone zones should be constructed to FEMA standards (City of Kingston Draft Comprehensive Plan, page 82). Such specificity supports recommendations below for updates to design standards and guidelines for the BOA proposing that new standards and requirements, especially related to climate change, should be

specifically detailed.

The plan reports on the popularity and success of the Broadway Overlay District, and recommends that it be extended to the Rondout waterfront.

2. Rondout Harbor Management Plan (HMP)

The US Army Corps of Engineers, New York District, who authored the Rondout Harbor Management Plan (HMP), bring a different perspective from other documents: it views the Rondout waterfront from the water and assesses issues related to its function as a harbor. Therefore, there are operational and infrastructural issues that are somewhat differently considered than elsewhere.

The HMP identifies several important issues that are related to land use and development in the BOA.

The Wastewater Treatment Plant (WWTP), a public asset, is described in the HMP as having its critical functions relocated out of the flood zone over time. After relocation, the property it now occupies could be redeveloped. It would be important, therefore, to include measures and conditions for the site in the BOA Plan. As with the Block Park site, however, too few certainties about the redevelopment plans prevent the creation of detailed design standards and guidelines at this time, except to note that it will be important to develop design standards and guidelines for the WWTP site in the future.

The HMP calls for the adoption of the 500-year standard for flooding to protect structures. While the specifics of the level of protections can be debated, one objective of recommendations to updates for design standards and guidelines for the BOA below is to support protection of structures from the effects of sea level rise and storm surge.

The HMP calls for the reengineering of certain waterfront properties which are necessary for water-related use. The recommendations for updates to the Design Standards and Guidelines stresses the necessity of water-dependent or water enhanced uses on the waterfront, so upgrades to properties to continue their water-related uses is supported.

The HMP calls for the use of certain waterfront parcels for use as riparian buffers, including Island Dock. The intent to increase the use of soft infrastructure to mitigate the effects of sea level rise and storm surge is included in recommendations below for updates to the design standards and guidelines for the BOA.

EVALUATION OF EXISTING STANDARDS, REGULATIONS AND GUIDELINES

This section reviews projects completed within the BOA under existing design standards and guidelines, and input received from design professionals involved in those projects.

Projects Completed in BOA Under Existing Regulations

Very few development projects have been completed on the Rondout Creek waterfront since development incentives where adopted in 1992 and development standards in 2005. The small sample of projects makes it difficult to evaluate the effectiveness of the existing design standards and guidelines as actually applied. The following are brief descriptions of five completed projects:

The Hudson River Maritime Museum (HRMM) Boathouse In 2012, the Museum constructed the first new building on the Rondout Creek in 20 years. It is widely admired for its maritime character, appropriate materials and historic colors. The barn-like building, with a raised first floor, is designed to tolerate five to six feet of flood waters; the height was determined based on historic flood levels at the site. Its open walls allow for flood water to pass through (wet-proofing) thereby avoiding the necessity of constructing walls with high hydrostatic pressure tolerances. Instead, the building was constructed on piles. The building's mechanical equipment was placed on the second floor out of the flood plain. But most of these features, designed to address adaptation to rising sea levels and storm surges, were included at the discretion of the applicant without the direction or requirements of the reviewing bodies. The architect turned to the nearby Cornell and Steel House buildings for inspiration. (Figure 07.71)

Feeney's Shipyard - In the Wilbur neighborhood west of the BOA, two industrial buildings were constructed for Feeney's Shipyard on the site of this established maritime use, and were completed recently without notable public comment or unusual review. (Figure 07.72)

"Rosita's" – The former Rosita's Restaurant building on the Rondout Creek, most recently shuttered, is now owned by the adjacent Hudson River Maritime Museum who plans to use it for building wooden boats. The previous restaurant renovation didn't fully meet the design guidelines, but was approved by the City at the time. The existing building is located near the waterfront lot line. Fortunately, a well-informed applicant is now anticipated for its revitalization and has an opportunity to leverage



FIGURE 07.71 The HRMM Boathouse respects the historic character of the Rondout while addressing climate change, 2015



FIGURE 07.72 A new building (right) for maritime uses was approved under current development standards at Feeney's Shipyard, 2014



FIGURE 07.73 The façade of the former Rosita's Restaurant matched its Mexican cuisine, 2014



FIGURE 07.75 Historic Kingston Waterfront Headquarters



FIGURE 07.74 The Steel House was approved for reuse as a restaurant under current development standards, 2015

available incentives for increased FAR and height to provide public waterfront access. (Figure 07.73)

Steel House Building - Review was conducted with development standards in place for adaptive reuse as a restaurant. The existing building is located near the bulkhead and the restaurant's private deck is cantilevered over the Rondout Creek. Public access to the waterfront currently goes around the building to the East Strand, but does not connect to the adjacent property to the east. (Figure 07.74). Ideally, the public walkway would be restored to the waterside of the

Steelhouse building by increasing the cantilever deck width. An enhanced steelplate bulkhead structure could support the extended cantilever. The Steel House Building is an example of designing to accommodate flooding, using a concrete floor and raised utilities.

The vision of Historic Kingston Waterfront: Historic Kingston Waterfront has stitched together dozens of waterfront properties to embrace the Local Waterfront Development Plan's vision of a continuous public waterfront from the Hudson River Maritime Museum to The Landing, a span of approximately $\frac{3}{4}$ mile. The former scrap yards and fuel tanks on this corridor are long gone. The scenic Rondout Creek is now visible for the first time in generations.

Historic Kingston Waterfront's Fleet Obsolete collection of historic WWII PT Boats and Historic Tugboats are now publicly accessible along the entire East Strand. Along with celebrating the rich maritime culture of the Rondout, Historic Kingston Waterfront has hosted art shows and other cultural events at the Cornell Steamboat Co. Building.

The public access development potential of the East Strand Waterfront Corridor can be substantially enhanced by restoring and extending the Ponchockie side streets to the waterfront walkway, thereby creating a series of "development rectangles" each with pedestrian frontage on all four sides. These rectangles will lend themselves to varied and complimentary mixed uses. (Figure 07.75)

Administrative Processes

The review of proposed projects in the RF-R and RF-H Districts is, at this time, perceived by some project applicants to be conducted in a duplicative and drawn out fashion. Applicants are faced with obligations to present proposals separately to the Heritage Area Commission, the Kingston Planning Board, and, if applicable, the Historic Landmarks Preservation Commission (HLPC). These three boards currently meet on separate days, with distinct sets of appointed members, and consider proposals under separate criteria. This process may drain the resources of some project applicants, especially small businesses.

A broader question has been raised of how the three review bodies consider their mission. Whether proposed projects are to be assessed solely using the specific standards and guidelines laid out in the text of the regulations, or partially based on the judgment of board members appears to be an important concern. Where there is no specific prescription for a given design proposal, the proper criteria to use in assessing it has been a continuing discussion.

Current design regulations apply more to relatively minor projects than to major, large-scale projects. However, there is apparently no distinction within the approval process of size and complexity of a proposed project. On the one hand, a minor façade restoration is obliged to adhere to procedural requirements and development standards equal to those of a major project. On the other hand, insufficient submittals for a minor project; that may lack useful graphics, dimensioned renderings, or details about materials or colors; can leave too much guesswork for the reviewing board.

Implications for Design Standards and Guidelines Updates

The provision in the #405-31 zoning for the RF-R and RF-H districts provides density increases as incentives to provide a set of improvements that benefit the public, the most compelling of which is open space. The very specific list of public benefits available discusses open space and public access in great detail. But, due to the very small number of completed projects in the RF-R and RF-H zones, there are few real-world lessons to be drawn as to this portion of the regulation's effectiveness. However, there are important implications in the existing design regulations concerning the creation of permanent open space and public access to the waterfront.

For the Rondout waterfront, the effort up until now to build a continuous waterfront that is publicly accessible by all sites has been complicated by the fact that each site has different elevations, existing waterfront edge conditions, land and water uses, and topography. Some parcels contain easements requiring permanent public access while others do not. Looking forward, with sea-level rise and storm surges, the actual location of the water's edge is anticipated to change over time, and any memorialization of public access on private property when the water's edge

is changing means that the public access on private property when the water's edge reasons, any success of the existing design regulations in creating an environment for permanent future public access or open space would be difficult to predict. (Figure 07.76)



FIGURE 07.76 The water's edge may change over time, 2015

RECOMMENDATIONS FOR UPDATES TO DESIGN STANDARDS AND GUIDELINES FOR THE BOA

The design standards and guidelines applicable to the BOA that the City of Kingston has already adopted are of high quality, cohesive and comprehensive. Since their adoption, thorough and excellent planning has been undertaken by the City through a number of recent studies and plans. Updates to the design standards and guidelines for the BOA are therefore primarily focused on incorporating the recommendations from those more recent efforts.

Fortunately, many updates are already underway for the City of Kingston as a whole that also embrace the BOA. This section begins with a list of those city-wide initiatives which should be supported to advance the BOA implementation. There are also some specific recommendations for the BOA. The section then describes recommendations for additional updates to design standards for the public realm and to design guidelines for private development sites within the BOA. The recommendations end with options to strengthen the enforcement and application review processes for projects within the BOA using design standards and guidelines.

Updates Underway for the City of Kingston

City-wide initiatives now underway that will have positive outcomes for the design standards and guidelines in the BOA should be encouraged and supported. In some cases, these recommendations include adding special sections specific to the Kingston waterfront including both the Rondout Creek and Hudson River to initiatives already underway (see bullets in the next section).

Zoning Code Update:

Support the revisions, expected to be underway soon, of Kingston's Zoning Ordinance that will align and be consistent with the updated Comprehensive Plan, Kingston 2025, and the BOA Implementation Plan.

Green Buildings:

Support the recommendation in the Kingston CAP to create and adopt green building standards for the City of Kingston, and to promote sustainable operations and maintenance for existing commercial buildings.

Climate Change:

Support the recommendation in the Kingston CAP to prepare and adopt a Kingston Climate Adaptation Plan.

• Recommend a special section on the waterfront based on the LWRP.

New Standards for Sea Level Rise and Flooding:

Support the recommendation of the Kingston Tidal Flooding Task Force to adopt sea level rise and flood-level projections by New York State Governor's 2100 Commission for planning purposes. Support the recommendation of New York State's Department of Environmental Conservation to consider exceeding the state's two-foot freeboard requirement.

• Determine design standards for specific projects in the BOA, such as the Rondout Wastewater Treatment Plant (WWTP) relocation.

Resiliency:

Support the recommendation of the Kingston Tidal Flooding Task Force for the City to prepare a Kingston Long-Term Resiliency Plan. Consider exceeding FEMA standards.

• Recommend a special section on the waterfront based on the LWRP and BOA.

Flood Risk:

Support the recommendation of Kingston's Tidal Flooding Task Force to require all new development in the Flood Hazard Overlay District to take flood risk into account.

Relocation of Critical Infrastructure Out of Floodplain:

Support the recommendation of Kingston's Tidal Flooding Task Force that critical infrastructure be relocated out of the Flood Hazard Zone.

• Recommend taking the next step on the feasibility study and capital plan for relocation of the Rondout WWTP above the 500-year floodplain.

Open Space Inventory:

Support the recommendations from the City's Parks and Recreation Master Plan for the creation of an inventory of open space assets.

Conservation Guidelines:

Support the recommendation of the Parks and Recreation Master Plan that the Conservation Advisory Council complete its work on conservation guidelines.

Incentives for Open Space:

Support the recommendation of the Parks and Recreation Master Plan that the zoning code include options for density increases in exchange for dedicated open space. (Figure 07.77)

• Recommend there be an analysis of how public waterfront access in the BOA could be leveraged in exchange for incentives other than the existing incentives for FAR and height increases.

Street Lighting:

Support the recommendation in the Kingston CAP to adopt an energy-efficient City Lighting Ordinance.

• Consult the Heritage Area Commission about updates to street lighting in the BOA.

Green Infrastructure:

Support the recommendation in the Kingston CAP to establish standards and guidelines that encourage or require the use of green infrastructure. (Figure 07.78)

• Recommend a special section on the waterfront based on the presence of brownfields, high water table, and other waterfront conditions including plans and tactics for different areas.



FIGURE 07.77 View to waterfront from Gill Street: increases in FAR and building heights may block these waterfront views, 2015



FIGURE 07.78 Shoreline erosion at Kingston Point Park: green infrastructure for the waterfront has unique requirements, 2015



FIGURE 07.79 The Steel House is located directly at the shoreline, 2015

Design Standards Updates for Public Realm

Continuous Waterfront Walkway

• Add new design standards for providing continuity of the waterfront pedestrian esplanade that support the working waterfront, recreational boating and other water-dependent or water-enhanced uses in the BOA.

Current development standards require all new development with water frontage along the Rondout Creek to provide a continuous pedestrian esplanade. This standard appears to be in conflict with the LWRP's goal of prioritizing waterdependent and –enhanced uses. Ideally, the public walkway would be restored to the waterside of the Steelhouse building by increasing the cantilever deck width. An enhanced steel plate bulkhead structure could support the extended cantilever. This would permit an uninterrupted waterfront walkway as envisioned by the Local Waterfront Development Plan. The importance of this continuity cannot be overstated. (Figure 07.79, Figure 07.80)

Access To and From the Water

• Add new design standards for waterside infrastructure that support access to and along the shore both to and from watercraft.

The BOA Design Strategy contains several BOA-wide and Strategic Site land uses and waterfront access strategies. While conceptual at this stage, certain actions can be taken that will guide the further refinement of the Design Strategy as it approaches implementation and formal commitments.

Kingston's existing design standards have no requirements for access from the water to the land or vice versa. Such a public amenity depends on the private objectives of private owners and is available only at individual waterfront sites. The lack of waterside infrastructure especially limits the possibilities for recreation boaters and the "blueways" and "watertrails" recommended in "Revitalizing Hudson Riverfronts." Access can occur by requirements for edge infrastructure on shorelines with bulkheads as well as innovations on natural features and ecological amenities that enhance the recreational boating experience and strengthen the ecological health of the Hudson Estuary as a whole. In the Town of Rhinebeck just across the Hudson River, for example, New York State Department of Environmental Conservation (NYSDEC) approved hanging "habitat boxes" for fish refuges on bulkheads at the train station and public dock. Along the BOA shoreline, standards



FIGURE 07.80 ... The sidewalk is presently disconnected around the Steel House, 2015

could be proscribed for fenders, cleats, bollards, emergency access ladders, life rings, wake protection, railings, rail openings, and float ramps. Design standards for waterside infrastructure are an essential part of public waterfront access and will make the interconnections between the land and water in the BOA a reality. Ecological benefits would be an additional positive outcome for these connections. (Figure 07.81, Figure 07.82)

Lighthouse Access

Support recommendations of the LWRP, Parks and Recreation Master Plan and Harbor Management Plan to reconstruct a walkway to Rondout Lighthouse as shown on the BOA plan. The walkway's design and specifications



FIGURE 07.81 Waterside infrastructure supports access to and along the shore, 2015



FIGURE 07.83 Many policy documents recommend reconstruction of a walkway to the Rondout Lighthouse, 2012



FIGURE 07.82 Access launch and boat slips at Hideaway Marina, 2015

would be heavily dependent upon site-specific conditions and marine engineering solutions. (Figure 07.83)

Sidewalk Usage:

• Establish a clear process and a set of standards for reviewing commercial (such as dining and advertising), hospitality and street fair uses on sidewalks.

Use of the sidewalk by businesses are not covered in the current design standards for the BOA. Standards should include dimensional requirements that would address the use of sidewalks by private adjacent uses. They are needed not only to promote quality sidewalk dining and a lively streetscape, but also to protect pedestrian access and mobility, especially when necessary to retain the public's access to the waterfront. Typically, a privilege to operate a business on the public sidewalk is associated with the consumer affairs or licensing function of a municipality. Both the requirements for such businesses and the site requirements can be cross-referenced in the zoning code. (Figure 07.84)



FIGURE 07.84 *Balance a lively streetscape with public access, 2015*

Design Guidelines Updates for Private Development Sites

Manual or Handbook for Private Developments:

- Consolidate the design guidelines for private developments on the Rondout Creek and Hudson River waterfronts (including BOA portions of them) into a Kingston Waterfront Design Standards and Guidelines Manual or Handbook.
- Clearly articulate the intent of the guidelines and their public benefits.

Design guidelines for private developments in the BOA are currently scattered throughout several zoning sections. Their intent is sometimes based on other policy documents and are not immediately apparent. This makes it difficult for developers and their design professionals to understand what is allowed as-of-right versus what will require special approvals and review. For most developers, building a private project as-of-right is substantially more cost-effective than going through the special approvals process. The handbook could be done relatively soon to support ongoing investment and economic development while the Comprehensive Plan and Zoning Code updates are being developed and adopted.

Planned Unit Development (PUD) for Sass-Block Park Development:

 Follow the model of the Hudson Landing regulating design manual on large waterfront parcels, such as the Block Park/Island Dock swap, and develop planning, architectural and open space guidelines customized to a master site plan.

The complexity of the current State Environmental Quality Review (SEQR) process for larger parcels, such as the Hutton Brickyards/Sailors Cove site, is time-consuming and expensive. There is currently no PUD or similar provision for large properties with waterfront frontages in Kingston. This has resulted in time-consuming application processes for some large-scale riverfront developments, like Sailors Cove. Using a successful precedent in Kingston, such as Hudson Landing, as a guide will help reduce the uncertainty for developers and the public at the same time. (Figure 07.85)

Green Buildings within BOA:

Require LEED BD+C Silver within the BOA boundaries.

In addition to the recommendation of the Kingston CAP to adopt green building standards city-wide, requiring new buildings within the BOA to comply with LEED BD+C Silver would distinguish it as a premier and sustainable area within Kingston.



FIGURE 07.85 Follow model of the Hudson Landing for guidelines on large waterfront parcels, 2015

ADMINISTRATIVE UPDATES FOR THE CITY OF KINGSTON

While the design standards and guidelines for the BOA themselves are underpinned by intent, well-drafted and detailed, their enforcement and the overall application review process are also important components of their effectiveness in promoting future growth that protects the BOA's historic and natural assets. The following recommendations detail updates that address how these standards and guidelines can better achieve their higher purpose through administration and implementation.

Guideline Enforcement:

• Establish a clearer process and provide funding for enforcement of design standards and guidelines.

There are currently overlapping responsibilities for enforcement of design standards and guidelines between the Planning Department, Building Department, and others. Because enforcement of the land use ordinances and building codes are a chronic issue for local governments, adopting clear lines of responsibility or assigning singleentity or officer roles would improve adherence to local government regulations. However, a weak link in the procedural chain for design standards and guidelines is that many provisions are related to construction; or the realization of plans for development. That phase of any building project is controlled by the building safety function of a local government. However, the approval in anticipation of the construction is overseen by the Planning Board. Therefore, there needs to be a stronger accountability and departmental management between these two different functions of city government. If staff time, training, or departmental communication can be identified as the gap, then funding to close this gap should be secured to enforce conditions of approval. Ideally, once an application is approved, the responsibilities for enforcement should be identified at that time and adequate provision of resources to carry them out provided. This will result in even-handed oversight, protection of adjacent property values, and a more coherent physical environment.

Consolidation of Waterfront Design Standards and Guidelines:

• Consolidate all waterfront design standards and guidelines in one place as part of the Zoning Code update.

The City will undertake an environmental impact assessment of the Draft Comprehensive Plan in the near future. At that time, all proposed Zoning Code changes that implement the goals of the Kingston 2025 Comprehensive Plan will be analyzed for impacts on the environment. Among those proposed changes in zoning could be a recommendation to consolidate the Waterfront Design Standards and Guidelines in one place. Waterfront design standards and guidelines are currently found in separate locations in the zoning code. Some of these observations - and potential solutions - about the difficulty of working with the Zoning Code are already called for in the Draft Comprehensive Plan.

Conformance with Design Standards and Guidelines:

• Allow the Planning Board to verify conformance with the design standards and guidelines based on the analysis of the City Planning Staff.

A consequence of the lack of consolidation of the design standards and guidelines in the current Zoning Code is that it is complex and time-consuming for the bodies reviewing applications to verify that an application conforms to all of the requirements. The Draft Comprehensive Plan notes that "administration of the district design guidelines by a separate approving board lengthens and delays approval time, thereby acting as an impediment to improvement of structures and economic development. It is therefore suggested that the Planning Board verify conformance, upon review and recommendation by City Planning Staff."

Application Review Process:

· Improve the review process for applications.

Depending on their complexity, the review process of applications for new developments in the BOA currently involves a number of different bodies: the Planning Board, Heritage Area Commission and Historic Landmarks Preservation Commission (HLPC).

- 1 The Planning Board reviews applications for all projects in the RF-R and RF-H Districts and Flood Hazard Overlay District including special permits in the RF-R and RF-H district. It determines incentives for those seeking increases in FAR or height in exchange for public benefits, such as public waterfront access. The Planning Board also reviews projects within the boundaries of the Mixed Use and Broadway Overlays Districts.
- 2 The Heritage Area Commission reviews applications within the boundaries of the Heritage Area, which includes the Broadway Overlay District and its design standards. The Commission also reviews applications within the larger Coastal Management Zone for consistency with the LWRP.

3 The HLPC reviews proposed exterior changes to landmark-designated buildings or properties located within historic districts.

Among the changes that could improve the application process are: 1) consolidating review hearings on one night; 2) holding the meetings of more than one organization on the same night, and 3) convening and adjourning each concerned body by grouping relevant applications.

Architectural Review Board:

• Study the advantages and disadvantages of creating an Architectural Review Board (ARB).

The discussion above on the series of reviews by separate bodies is not intended to diminish the importance of each organization's mission or code-defined role. But there is a blurring of the important distinction between administering specific provisions of various parts of codes, and interpreting conformance to design standards and guidelines based on the qualities of a proposed project.

One solution that has been suggested is to create an Architectural Review Board (ARB) specifically to interpret the objectives of Waterfront Design Standards and Guidelines, and leave the administration of other parts of the codes to the other agencies. This suggestion is included, for example, in "Revitalizing Hudson Riverfronts." As illustrated below, an ARB has the potential to provide an objective application of clear criteria for a project, the basis of whose approval is evidence rather than opinion or preference, for projects that must comply with design standards and guidelines.

The specific features of an Architectural Review Board, and their respective strengths and weaknesses, are summarized in Figure 07.86.

ARCHITECTURAL REVIEW BOARD

FEATURE	PROS	CONS
Credentialed Membership (in design professions)	Expertise and practice of objectivity (others are ex-officio)	Personal aesthetic vision or preferences; fewer "lay" members; frequent recusal due to business role in projects (esp. for smaller communities).
Decisions are credible	Application of clear criteria must be supported with evidence; "relief valve" for controversial advice is Planning Board's ultimate decision	Members need continuous training; small scale of some projects may not merit such close review and slow approvals; more useful for large master- planned projects.
Mission furthers only design objectives	Objectivity; clarity of criteria	"Too professional," not citizen – friendly; members too busy professionally to have necessary public outreach role; Misunderstanding of "authentic" versus "reflective of community character."
Interpretive powers are objective	Intent of criteria applied case-by-case, not prescriptive, allowing design innovation: each property and project's reasons for approval are transparent; applications must be detailed	Developers prefer clarity of criteria at the start; expensive or onerous for small project applicants; enforcement still decoupled from building safety function of city government.
Prescriptive architectural guidelines less needed	Clear distinction between interpretation and administration as advisory to Planning Board	Another layer of review.

FIGURE 07.86 Architecture Review Board - Strengths and Weaknesses

LOCAL MANAGEMENT STRUCTURE TO IMPLEMENT THE BOA

MANAGEMENT STRUCTURE RECOMMENDATIONS

Management of the Kingston Waterfront Brownfield Opportunity Area Plan (the BOA Plan or Hudson Riverport Vision Plan) will be a complex undertaking because the implementation of the plan will span over a more than 20-year period and involves a wide variety of projects ranging from public infrastructure, transportation, and open spaces to large-scale private developments and individual properties. This will require not only the active participation of the City of Kingston, Ulster County and New York State, but also of numerous stakeholders from property owners and private developers to existing businesses, residents, community members, and other local organizations. New partnerships will need to be formed and existing relationships strengthened. Funds will need to be raised from multiple sources, strategic development sites marketed, incentives negotiated with potential investors, specialized consultants retained, and progress overseen. Successful implementation of the BOA, which includes the Rondout Creek from Island Dock to the Rondout Lighthouse and the Hudson River from Kingston Point Park to Kingston Point Beach, will require a strong management structure to coordinate these efforts and to lead the BOA implementation projects forward.

RECOMMENDATIONS

As part of this BOA Plan, it is recommended that the City of Kingston create a new Kingston Waterfront Development Authority; structured as a Local Development Corporation (LDC) and classified as a municipal development authority. The goal of that entity will be to manage the redevelopment of the Kingston waterfront within the boundaries of the Local Waterfront Revitalization Program (LWRP), which covers both the Rondout Creek and Hudson River waterfronts which includes the BOA Plan Area. Implementing the BOA Plan within a management structure for the LWRP as a whole brings synergies and unifies the vision for Kingston's waterfront revitalization.

The Kingston Waterfront Development Authority will stimulate development by centralizing overall management and coordination of both the LWRP Implementation Plan (LWRIP) and the BOA Plan. The LWRP already carries with it existing funding and embraces a wide range of uses including port functions. Using the larger LWRP boundaries, known as the Coastal Management Zone (CMZ), will bring consistency and alignment with existing public policies. As an LDC the KWDA can finance redevelopment with a portfolio of options: by issuing bonds to support redevelopment projects, administering low-interest loans, mobilizing the city budget, providing grant funding for infrastructure, as well as raising funds. The KWDA will incentivize development by offering tax incentives and, assisting with loans as well as prioritizing public infrastructure to support specific site developments. The KWDA is able to handle the cleanup of brownfield sites and oversee private sites receiving tax incentives from New York State's Brownfield Cleanup Program. As an LDC it can control and manage property through legal agreements, for example, it can facilitate the proposed land swap between Block Park and Island Dock. The KWDA is able to fund its own operations by collecting fees, such as fees for leasing or renting properties, and receiving grant funding and federal subsidies. (Figure 07.87)



FIGURE 07.87 The LWRP covers both the Hudson River and Rondout Creek riverfronts, 2015.

As an alternative, the city could consider using an existing structure but expand its scope and revise its Board of Directors to fit the needs of the BOA Plan. Among the existing structures that have been suggested are the Kingston Local Development Corporation (KLDC) and the Ulster County Industrial Development Agency (UCIDA). Either one of these entities would have to modify its functions and Board of Directors to enable it to manage the redevelopment of the Kingston waterfront.

A key to evaluating the advantages and disadvantages of the recommended KWDA, and other alternatives, is to understand its specific responsibilities. These advantages and disadvantages are discussed in more detail in the sections that follow.

RESPONSIBILITIES

The design strategy for the BOA Plan envisions a world-class, vibrant, mixed-use waterfront that confronts both existing contamination of brownfield sites and the increasing risks of flooding from storm surges and sea level rise. The BOA Plan also recognizes that all this must balance protecting and enhancing Kingston's existing assets; its boating, history, culture, heritage, industrial building stock, natural resources, and mixed-use community. To achieve this broad vision, the most effective management structure to coordinate and administer the Implementation Plan needs to be an entity that can undertake a wide variety of responsibilities.

Key responsibilities could include the following:

1 As a basic requirement, the management structure to implement the BOA Plan needs to have the ability to startup, manage and coordinate the redevelopment as a whole; oversee the approval and permitting process for development projects; have the expertise to facilitate applications and review projects; and encompass the capacity to lead and advance the BOA Implementation Plan over time.

(Note: The list below corresponds to the "Responsibilities" used in the examples of potential management structures which are detailed in Figure 07.88 and Figure 07.89, which begins with number 1 describing their legal entity.)

- **2** Loans Review loan applications and creditworthiness, issue loans, and be accountable for timely repayment.
- **3** Fund Raising Prepare grant proposals for funding and be able to raise funds to advance BOA implementation projects, collect fees for rental and leasing of properties, apply for bonds from banks for specific purposes.
- **4** Bonding Authority Issue bonds to support BOA redevelopment projects, such as site preparation and infrastructure.

- 5 Incentives Offer incentives, such as tax exemptions and Payment in Lieu of Taxes (PILOTs), to potential investors to attract public and private investment in the BOA.
- 6 Relationships with local government Establish permanent relationships and work closely with the Mayor's Office, City departments, and local agencies that provide policy support and funding for implementation.
- 7 Relationships with State and Federal agencies Cultivate and maintain close relationships with relevant agencies of State and Federal government.
- 8 Private Sector Connections Provide support to and work closely with private sector businesses and business associations.
- **9** Marketing of Development Sites Promote and market the BOA's Strategic Sites and other BOA development properties.
- 10 Capital Commitments Promote capital commitments by the public sector in public improvements (such as, brownfield remediation, infrastructure, utilities, parking, public streets, flood protection, and public open space).
- **11** Political Independence Protect staying power over different political cycles (especially for multi-year projects); and preserve autonomy from direct political pressures.
- **12** Negotiations with Developers Negotiate with developers and private investors (balancing the interests of investors with other stakeholders, such as residents, environmental activists and community advocates).
- **13** Property Acquisition Acquire, hold and dispose of land, and create and monitor easements.
- **14** Ongoing Outreach Reach out to local communities of residents, businesses and multiple other stakeholder groups on an ongoing basis.

ADVANTAGES

The Kingston Waterfront Development Authority (KWDA) has the advantage of being created by the City of Kingston as a not-for-profit corporation with the authority to undertake all of the responsibilities listed above. As a Local Development Corporation (LDC), it will be relatively easy to establish under Section 1411 of the Not-for-Profit Law of New York State. Industrial Development Agencies (IDAs), by contrast, require enabling legislation enacted by the State legislature making them more difficult to establish than LDC's.

In addition to being relatively easy to establish, the KWDA has the advantage of providing autonomy from election cycles while allowing for oversight by the City of Kingston, and being a strong partner for collaboration with other local organizations.

The City of Kingston can maintain oversight of the KWDA by the Mayor's appointment of its leadership. It is envisioned that the KWDA would have a dynamic leader with a sense of direction and purpose, who works with the City to select the Board of Directors. The Chairperson of the Board is the most important person for the implementation team. That person should not be a City of Kingston employee, as the KWDA needs to function as an autonomous entity, not constrained by the current political situation. He or she should demonstrate strong leadership, vision and ability to bring together a team. The Board members will be selected to reflect the main stakeholders, support good relationships with the Kingston City government and have the ability to get things done. They need to be visionary and action-oriented. It would be very helpful to engage people who have expertise in such areas as grant writing, banking and finance, legal arrangements with public entities, community outreach, business, management and real estate. The Board should define its direction, mission and purpose with clear job descriptions for its members and for staff. The ability of Board members to raise revenue from different sources will determine how many paid managers and employees the KWDA can recruit. A visionary leader and a strong Executive Director will, in turn, have a powerful influence on how quickly parts of the LWRP and BOA plans are implemented.

While a Community Development Corporation (CDC) could be established with similar capabilities, its structure would work better for the limited area defined by the BOA Plan, whose boundaries include parts of the Rondout and Ponckhokie communities. The larger Coastal Management Zone (CMZ) covered by the LWRP, which includes a number of different communities, would be more difficult to manage effectively under a CDC.

It is likely and desirable that any newly established entity such as the KWDA, would work closely with existing agencies and organizations to draw on their expertise and commitment in certain areas. These would include organizations such as the Heritage Area Commission, Ulster County Chamber of Commerce, Kingston Land Trust, Kingston Local Development Corporation, Kingston Waterfront Business Association, RUPCO (formerly the Rural Ulster Preservation Company), Scenic Hudson, Ulster County Development Corporation (UCDC), and others. It will be important for these groups to work collectively in the same direction, as each has a defined focus. It will be the responsibility of the KWDA to coordinate multiple collaborators to lead the revitalization of Kingston's waterfront.

DISADVANTAGES

As a Municipal Public Authority, the Kingston Waterfront Development Authority would come under Section 2(2)(b) of the Public Authorities Accountability Act (PAAA, 2005) and Public Authorities Reform Act (PARA, 2009) of New York State. These were enacted by the New York State Legislature to rationalize and introduce more controls over Industrial Development Authorities (IDAs), Local Development Corporations (LDCs) and Community Development Corporations (CDCs) that are "affiliated with, sponsored by, or created by a local government." The KWDA would be required to submit annual reports to the independent New York State Authorities Budget Office (ABO) established by the PARA; and would need to post information on its mission, current activities and finances on its website (more information can be found on the ramifications of the PAAA and PARA in Appendix A). While this paperwork can be onerous, the disadvantages of those requirements can be offset by the fact that the KWDA would also include the Local Waterfront Revitalization Plan (LWRP) and therefore have more capacity to support the appropriate staff to meet the requirements of the ABO.

Another disadvantage of establishing a new not-for-profit entity is that it requires legal documentation and can be time-consuming. If the length of time it would take to establish a new entity is of concern to the City of Kingston, using an existing structure but expanding its scope and revising its Board of Directors to fit the needs of the BOA Plan would be an alternative.

In either case, it will be necessary for the City of Kingston to discuss with knowledgeable legal counsel any local management entity, the tasks and responsibilities that will be required, and how to structure its by-laws, board membership, oversight, and financing arrangements.

TYPE OF PUBLIC Structure	PROS	CONS	EXAMPLES IN NY STATE *Examples in appendix a
Local Government: City of Kingston (CoK) Town of Babylon	 Ability to raise revenue from taxes, government grants Authority to acquire and market land Consistent interaction with State government Works with local stakeholders Ability to invest in public infrastructure, oversee cleanup Has staying power Empowered to negotiate with developers Authority to acquire and dispose of property 	 No ability to provide loans or grants Not independent Subject to political interests Needs to balance private sector, community and environmental interests 	Kingston Office of Economic Development and Strategic Partnerships (KOEDSP)*; Planning Department*; Wyandanch Office of Downtown Revitalization*
Economic Development Corporation (EDC): City of Kingston, Ulster County City of New York State of New York	 Ability to provide loans and incentives to investors in distressed areas Ability to raise funds from government grants, business contributions Bonding authority State, county or city sponsored agency Works closely with private sector Ability to market strategic development sites Can provide funds for public infrastructure Has staying power Empowered to negotiate with developers Ability to acquire land Is independent 	 Main objective of EDCs is economic development, so may not take environmental, social or community concerns into sufficient account May not work closely with local government Would need to work out commitments of budget and staff for BOA Implementation Plan 	Ulster County Development Corporation (UCDC)*; South Bronx Overall Economic Development Corporation (SoBRO)*; Empire State Development (ESD)*
Industrial Development Agency/Authority (IDA): Ulster County City of Yonkers City of Buffalo	 Ability to provide loans and grants to businesses Ability to raise funds through fees from businesses participating in approved projects Ability to offer tax incentives, e.g. tax-exempt financing Bonding authority & can issue bonds through EDC Property tax exemptions recaptured through PILOTS (payments in lieu of taxes) Authority to acquire and lease properties Works closely with local government and businesses Is independent Ability to promote capital commitments in public spaces Has staying power 	 Require enabling legislation by NY State (NYS) Mainly assists industrial and manufacturing businesses, so may not take environmental, social or community concerns into sufficient account Statute prohibits from assisting retail projects and lending to not-for-profits or public utilities Restrictions on civil facilities projects Would need consistent interaction with NYS agencies that provide funding; audited by NYS May share staff with EDCs May not have staff capacity to oversee and market Kingston BOA Implementation Plan May outsource some services 	Ulster County Industrial Development Agency (UCIDA)*; Yonkers Industrial Development Authority (YIDA)*; Buffalo Urban Development Corporation (BUDC)*
Municipal or State Development Authority	 Ability to raise money via rents from commercial tenants, fees concession revenues, grants and donations; corporate membership Board can include reps from State, County, City, business, community groups, etc. Can market properties to business investors Staying power if it raises sufficient revenue to have enough full time staff Is independent 	 Public authorities have accountability for audits to NYS Authority Budget Office (ABO) Kingston BOA may be too small for a state authority May lack sufficient staff capacity and resources 	Battery Park City Authority; Brooklyn Bridge Park Development Corp.; Numerous IDA, CDCs, and LDCs have been classified as public authorities by the NYS ABO

FIGURE 07.88 Evaluation Matrix of Potential Management Structures: Public

TYPE OF NOT-FOR-PROFIT Structure	PROS	CONS	EXAMPLES IN NY STATE *Examples in appendix a
Community Development Corporation (CDC): City of Kingston Town of Babylon	 Can be created for a specific purpose, e.g. "Rondout Waterfront CDC" Assists with loans, incentives, surety bonds Can obtain community development block grants (CDBG) for waterfront development from NYS Board may have city, state and community members Ability to acquire public property; targets vacant or underutilized commercial property Manages community development projects Works in partnership with community organizations, development corporations, public sector, and others Ability to lead community visioning; design open spaces; draft zoning regulations Ability to assist with building community resilience for climate change 	 Would need to ensure sufficient oversight and accountability Would come under ABO regulations if classified as a "public authority" Would need to engage support of private sector Would need to engage with NYSDOS and DEC on a consistent basis Lack of staying power May lack staff capacity and resources 	Wyandanch Community Development Corporation (WCDC)*
Local Development Corporation (LDC): City of Kingston City of Yonkers	 Could be created as a municipal development authority for a specific purpose Ability to assist with loans, incentives, surety bonds Administers revolving loan funds; assists businesses with gap financing Works closely with local government Can receive federal subsidies Authority to acquire land and raise revenue from leasing and financing Easy to establish by county, city, town or village 	 LDC classified as public authorities can issue bonds, but have accountability for loan funds and bonds to NYS ABO In the past some LDCs in NYS have overseen large projects without competitive bidding or sufficient financial oversight May lack staff capacity and resources 	Kingston Local Development Corporation (KLDC)*; Yonkers Downtown Waterfront Development Corporation (YDWDC)*

FIGURE 07.89 Evaluation Matrix of Potential Management Structures: Not-for-Profit

EVALUATION MATRIX

While many different types of local management structures have been employed for waterfront revitalization around the country and the world, for implementation of the BOA Plan an entity recognized by the laws of New York State is required in order to qualify for the benefits associated with a BOA designation, such as New York State tax incentives, that help ensure the desired uses materialize on the strategic brownfield sites.

Many different types of management structures acceptable in New York State were considered in this study. The results of that analysis are found in the detailed Evaluation Matrix on the pages that follow. The matrix is a summary of the potential management structures for the BOA Plan. Figure 07.88 is organized into public structures, such as an existing local governmental department Economic Development Corporation (EDC), Industrial Development Agency (IDA), and municipal or state authority. Figure 07.89 is organized into not-for-profits such as a Community Development Corporation (CDC) and Local Development Corporation (LDC). Those types of structures can be found in the left-hand column. The pros and cons of each type of entity are summarized in the central two columns. On the right-hand side, examples of each type of organization are listed. Those noted with asterisks are described in more detail.

Based on the results of the cross-comparison in the Evaluation Matrix, the types of entities that most closely matched the ability to carry the responsibilities for the BOA Plan were found to be the IDAs, LDCs and CDCs. All three can be classified as Municipal Public Authorities, and LDCs and CDCs could also be organized as not-for-profits.

DESCRIPTIONS OF DIFFERENT STRUCTURES MOST CLOSELY MATCHED TO BOA MANAGEMENT RESPONSIBILITIES

Industrial Development Agencies or Authorities (IDAs)

According to the Office of the New York State Comptroller's report; Industrial Development Agencies in New York State (May 2006); legislation was enacted in 1969 to provide for the creation of IDAs to facilitate economic development for specific locations within New York State and to define their powers as public benefit corporations. IDAs generally work to improve economic conditions in their jurisdictions by attracting, retaining and expanding private businesses through financial incentives. Conceived to advance industrial and manufacturing developments, they also have latitude to assist many other types of projects, such as educational facilities and transportation improvements. The statute, however, prohibits them from assisting retail projects except in certain cases such as retail associated with tourism. Each IDA is established by the New York State Legislature at the request of a sponsoring municipality and is governed by a board appointed by the local municipality. Since 2008, IDAs have been unable to finance facilities owned or operated by not-for-profit corporations

Local Development Corporations (LDCs)

LDCs are private, not-for-profit corporations typically established by local governments for public purposes, such as economic development. According to New York State Comptroller's report; Municipal Use of LDCs and Other Private Entities (April 2011). LDCs were created to reduce unemployment and promote job opportunities, provide job training, conduct research to attract or retain industry, and assist with "lessening the burdens of government." Given these objectives, LDCs' powers are broad and they are exempt from many provisions of local governments, such as being able to issue debt that is not subject to the limits on debt for the local municipalities.

Community Development Corporations (CDCs)

CDCs are not-for-profit corporations that are community-based structures engaged in the revitalization of their neighborhoods, which are typically low-income and underserved. CDCs often grow out of active grass-root participation. CDCs can be involved in a range of efforts to assist their communities, for example they are known for developing affordable housing and commercial properties, neighborhood organizing and planning, economic development and job-creation, as well as providing services to residents such as education, job-training and social services.

OTHER BOAS IN NEW YORK STATE

When researching existing designated New York State BOAs and ones in progress that could serve as models for Kingston; there are twelve that are designated BOAs; however, none have yet completed Step 3. Currently among the Step 3 BOA communities, the most similar to Kingston's in terms of land uses is the Town of Babylon's Wyandanch BOA. Figure 07.90 is a detailed description of the management structure of the Wyandanch BOA. Also relevant were the South Bronx Overall Development Corporation's (SoBRO) South Bronx, Port Morris and Harlem River BOA and Buffalo Urban Development Corporation's (BUDC) South Buffalo BOA. (See Appendix A "Examples of Potential Management Structures" for detailed information on the South Bronx and South Buffalo BOAs.)

There are no other BOAs in Step 3 within Kingston's New York Department of State region, which is Region 3, Mid-Hudson. The only BOA in geographic proximity to Kingston is a Step 1 effort by Ulster County, which is conducting a county-wide prenomination study that, according to the New York Department of State's information on BOA projects, will be "coordinated with and build on existing economic development and priority growth area plans."

PREVIOUS PROPOSALS FOR LOCAL MANAGEMENT STRUCTURES

Both an Industrial Development Authority (IDA) and an Economic Development Corporation (EDC) have been previously proposed to manage the redevelopment of the Kingston waterfront.

Kingston Industrial Development Agency (IDA)

The 2008 the "Kingston Waterfront Development Implementation Plan" recommended that "the city form an Industrial Development Agency (IDA) or a waterfront authority to manage the redevelopment of Kingston's waterfront" (Page 56 of the Waterfront Development Plan) This recommendation was never implemented because of the uncertainty surrounding the use of an IDA at the time at the State level, which then resulted in the earlier discussed PARA in 2009.

Ulster County Development Corporation (UCDC)

Another possibility raised by the 2008 "Kingston Waterfront Development Implementation Plan" was for the City of Kingston to consider working with the Ulster County Development Corporation (UCDC). The plan notes that this would require agreements between the City of Kingston and the County Of Ulster to coordinate their respective roles, financial contributions, priorities, staff levels and other resources devoted to the project. This recommendation was never implemented because the UCDC's set of responsibilities extends across Ulster County, which is a broader geographic area than the BOA Plan covers. As such it would be unable to wholly dedicate its resources to Kingston or to prioritize the BOA Plan projects for the Kingston waterfront.

LAND BANKS

The establishment of a land bank is being explored by the City of Kingston to assist with issues like affordable housing and returning vacant or abandoned property to the tax rolls. While a land bank structure may be a useful tool for redevelopment of the City of Kingston as a whole, it may not be a relevant tool for implementing the BOA Plan. The 10 existing land banks in New York have been established in areas with large numbers of abandoned properties, such as in Rochester, Buffalo and Newburgh. The current situation in Kingston's BOA is considerably different: there are few vacant or abandoned properties within its boundaries and the BOA-designated Strategic Sites are either public parks or already owned by private parties and developers. (See "Newburgh Land Bank" in Appendix A for more information on land banks.)

Management Structure of Wyandanch BOA

The Town of Babylon's Wyandanch Downtown Brownfield Opportunity Area (BOA), which is devoted to downtown redevelopment, is the furthest along in the planning process of all New York State projects receiving Step 3 grant funding. The local management structure, the Town's Office of Downtown Revitalization, is unique to this project and illustrates important considerations for other BOA plans including Kingston's. Development that is underway in Wyandanch is reassuring because it provides an example that there can be tangible outcomes from BOA planning. It is also helpful, in learning lessons of success, to recognize the specific land ownership and planning background conditions in Wyandanch along with the decisions that were made to ensure successful implementation of the plan. Described below are the background conditions pre-BOA, genesis of the BOA project, resulting management structure, timeline of the process, and similarities to and / or differences from Kingston's BOA.

BACKGROUND CONDITIONS PRE-BOA

Currently, the Wyandanch BOA project area is entirely owned or controlled by the Town of Babylon, both from long-time ownership patterns and as a result of acquisitions and the use of eminent domain during earlier urban renewal projects. Key properties in the 105 acre BOA area were initially vacant, brownfield, blighted, or under-utilized sites. The land assembly meant that development of a vision for the area could proceed smoothly under one owner, a single public entity, and that construction could proceed across the entire project at once rather than on a site-by-site basis. The assemblage also removed obstacles to redevelopment, such as avoiding a lengthy and costly acquisition process for private developers and assuring that contiguous sites were available for development (i.e., no holdouts). The local municipality undertook the planning process while also having control over the land which was a significant advantage.

The town conducted a Blight Study as well as an area-wide brownfield assessment which pre-date the Town's entry into the BOA program and were part of the reason it was able to skip Step 1. Implementation of the Urban Renewal Plan took place during Step 2. The Town's elective leadership committed significant financial, staff and political resources to the planning for the BOA. Early planning means that anticipated property tax revenue and other positive economic outcomes for the community will appear well after the soft costs of its planning documents are expended, and after completion of the project itself.

GENESIS OF THE BOA PROJECT

The Wyandanch Community Development Corporation (WCDC), a local not-for-profit, formed over 50 years ago to address chronic disinvestment, which brought their concerns about possible contaminated sites and lost opportunities to the attention of the then Town Supervisor Steve Bellone, and the Wyandanch community as a whole in the early 2000s. From the WCDC's leadership during a community visioning process, the Town of Babylon completed and adopted a "Wyandanch Rising Hamlet Plan," which is a typical process used to manage comprehensive planning for the larger territories of Long Island's Towns.

Following the Hamlet Plan, the Blight Study led to the creation and adoption of an Urban Renewal Plan. This led, in turn, to the Town of Babylon obtaining a BOA grant with the intention the Town would act as an umbrella planning structure for the overall project.

The Town then engaged consultants to draft a Master Site Plan, and following its completion, a complete Form-Based Code and Open Space Master Plan that would regulate the Master Site Plan's development. The National Development Council, one of the consultants on the plan, worked out the financial feasibility analysis for developments, including tax abatements and low-income housing tax credits. The Town's Industrial Development Authority (IDA) provided a tax abatement in the form of a Payment in Lieu of Taxes (PILOT). With the Master Site Plan, Open Space Master Plan and Form-Based Code in place, the Town then developed marketing materials, issued a RFQ (Request for Qualifications) and then an RFP (Request for Proposals) for a Master Developer comprised of investors and developers to carry out the detailed design, construction, and long-term management of the income-producing portions of the project. Large, upfront investments on the part of the Town of Babylon in new infrastructure made the site more attractive to developers and the Master Developer is now in place.

RESULTING LOCAL MANAGEMENT STRUCTURE

Overseeing this process as a whole is the Office of Downtown Revitalization with a small Town staff dedicated to BOA implementation and downtown redevelopment housed within the planning function of the Town of Babylon's government. The nature of the project's complete build-out scenario helps accelerate implementation of the BOA. In addition to overseeing the Master Developer, the Office of Downtown Revitalization's ongoing work includes preparing the BOA Step 3 Implementation Strategy, as well as administering grants and other funding.

TIMELINE

- 2003 Revitalization started; community visioning process undertaken
- 2004 Wyandanch Rising Hamlet Plan adopted by Town Board; Office of Downtown Revitalization established
- 2005 Wyandanch Rising Implementation Committee formed
- 2007 Wyandanch Blight Study
- 2008 US Post Office opened in downtown
- 2009 BOA Step 2 Nomination complete; Wyandanch Downtown Revitalization Plan adopted; Urban Renewal Plan adopted; Generic Environmental Impact Study adopted
- 2010 Intermodal Transit Facility Environmental Assessment; sewer extension groundbreaking; Conceptual Plan for downtown Wyandanch and Straight Path Corridor completed
- 2011 Selection of Master Developer for hamlet area; Form-Based Code and Open Space Master Plan adopted
- 2014 Form-Based Code amended

SIMILARITIES AND DIFFERENCES FROM THE KINGSTON WATERFRONT BOA

Similar to the City of Kingston, the Town of Babylon has been engaged in a long-term planning process which positions the BOA within the framework of a larger vision for its redevelopment. Like the Kingston BOA Plan, Wyandanch is undertaking downtown revitalization for areas affected by multiple brownfield sites and is in need of economic development. Land uses in both of the BOAs encompass residential, commercial, and retail activities as well as public open spaces. In the Wyandanch BOA, like Kingston's, brownfield cleanup incentives and major investments in sewer infrastructure and multi-modal transportation linkages are fundamental as catalysts for private-sector investment. Community benefits, such as job creation, are also an integral part of both efforts. Those were achieved in Wyandanch through collaborations with the local WCDC, which is a model Kingston is well-positioned to follow.

Major differences between the two BOAs is the difference in land ownership and waterfront maintenance costs. The Wyandanch BOA does not include any waterfront areas, whereas Kingston's faces the high costs of waterfront infrastructure and flood protections which add a premium onto its redevelopment. In addition, the Town of Babylon owns or controls the entire Wyandanch BOA project area, whereas all the Strategic Sites and many other properties within the Kingston BOA are privately held. This allowed Babylon to take a different approach to planning and development: a master planning process followed by detailed controls established under an overall site plan, open space plan and form-based code. By contrast Kingston's BOA management structure will need to be instrumental in providing incentives for privatesector development and highly strategic in how it leverages public investments in infrastructure, public transportation, and open spaces.

EXAMPLES OF POTENTIAL MANAGEMENT STRUCTURES

In Figure 07.91 there are 11 examples of potential management structures currently operating in New York State. At least one example is provided for each of the potential types of legal entities. These are organized in the same sequence as those in Figure 07.88 and Figure 07.89: first the public organizations and then the not-for-profits. Each example is summarized against the set of aforementioned responsibilities which are numbered 1 through 14 and are shown in the left-hand column. How the example matches with the responsibility is shown in the right-hand column. Each example is organized in the same order by number to allow for direct cross-comparisons between them. These examples can be found in Appendix A.

TYPE OF STRUCTURE	EXAMPLES IN NY STATE		
PUBLIC			
Local Government	City of Kingston (CoK) Kingston Office of Economic Development and Strategic Partnerships (KOEDSP) Kingston Planning Department		
Economic Development Corporation (EDC)	Ulster County - Ulster County Development Corporation (UCDC) City of New York - South Bronx Overall Economic Development Corporation (SoBRO) State of New York - Empire State Development (ESD)		
Industrial Development Agency/Authority (IDA)	Ulster County - Ulster County Industrial Development Agency (UCIDA) City of Yonkers - Yonkers Industrial Development Authority (YIDA) City of Buffalo - Buffalo Urban Development Corporation (BUDC)		
NOT-FOR-PROFIT			
Community Development Corporation (CDC)	Town of Babylon - Wyandanch Community Development Corporation (WCDC)		
Local Development Corporation (LDC)	City of Kingston (CoK) - Kingston Local Development Corporation (KLDC) City of Yonkers - Downtown Waterfront Development Corporation (YDWDC)		

FIGURE 07.91 Examples of Potential Management Structures

07 IMPLEMENTATION STRATEGY

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INTRODUCTION

This section provides a description of how, during the course of preparing the Hudson Riverport Vision Plan for the Kingston Waterfront Brownfield Opportunity Area (the Hudson Riverport Vision Plan or the BOA Plan), the requirements of the State Environmental Quality Review Act (SEQRA) have been fulfilled and complied with, including identifying specific conditions or criteria under which future actions will be undertaken or approved, including requirements for any subsequent SEQRA compliance.

The City of Kingston Common Council (the City) acting as Lead Agency pursuant to SEQRA and its implementing regulations (6 NYCRR Part 617) has prepared this combined Plan and Draft Generic Environmental Impact Statement (DGEIS) to support the adoption and implementation of the Hudson Riverport Vision Plan for the Kingston Waterfront Brownfield Opportunity Area (BOA). Adoption and implementation of the BOA Plan constitutes the "Project" or "Proposed Action" subject to SEQRA.

The required content for a Draft GEIS (per 6 NYCRR Part 617.9) is included in this section as well as other sections of the complete BOA Plan (which is comprised of both the Step 2 Nomination Study and Step 3 Implementation Strategy). Figure 08.1 describes how Draft GEIS content requirements are satisfied and where in the body of the Final BOA Plan specific content can be found. A list of additional underlying studies, reports and other information obtained and considered in preparing the GEIS is included at the end of this section.

FORMAT AND CONTENT

In accordance with the NYSDOS BOA Program Guidance, the DGEIS is incorporated into the body of the BOA Plan so they are one unified document. It is noted here that the BOA Plan consists of both the Step 2 Nomination Study and Step 3 Implementation Strategy. The Step 2 Nomination Study is included in Appendix C.

The environmental assessment herein has been prepared in general accordance with 6 NYCRR 617.10 (Generic Environmental Impact Statements), and as such will present a more general set of existing conditions and analyses than a conventional or project-specific Draft EIS. This assessment defines the Proposed Action in terms of potential projects identified in the BOA Plan and includes assessments of anticipated impacts commensurate to the level of detail available at this time. Due to the prospective nature of the BOA Plan, the analyses are based on conceptual plans and available information. Where no detail is available, qualitative estimations of impacts are provided, and where appropriate analyses are identified that should be required when future individual projects are proposed.

The general framework of this section provides:

- A conceptual description of the proposed action or project in the form of a series of future redevelopment projects.
- **2** A characterization of the environmental setting and existing conditions within the BOA study area.
- **3** An identification and assessment of the potential significant impacts that are likely to occur under implementation of the BOA Plan; and identification of possible mitigation measures to avoid or reduce their impacts.
- **4** An evaluation of alternatives to implementing the BOA Plan as presented (in Evaluation of Alternatives).
- 5 An identification of thresholds and criteria for additional review under SEQRA to address site-specific impacts that cannot adequately be addressed at this time in the conceptual level BOA Plan.

GEIS CONTENT REQUIREMENTS

Certain elements in other sections of the BOA Plan meet corresponding SEQRA required minimum content for a GEIS. This section relies heavily on the inventory and analysis prepared in the Step 2 Nomination Study and is augmented with information prepared for the extended BOA boundary, and new information which has been updated during preparation of the Step 3 Implementation Strategy. Figure 08.1 shows where SEQRA DGEIS content requirements are met by other sections of the BOA Plan.

GEIS TOPIC	DOCUMENT*	SECTION OR CORRESPONDING MAP	PAGE(S)
Description of Proposed Action	Step 2	Section 1 (Project Description and Boundary)	pp 21-22
(Project Description)	Step 3	Section 8 (Project Description [Proposed Action])	Vol III: pp 10-15
SEQRA Public Hearing	Step 3	Section 3 (Community Engagement)	Vol I: pp 22-27
Description of Environmental Setting	Step 3	Section 8 (Environmental Setting – Existing Conditions)	Vol III: pp 16-35
- Community and Regional Setting	Step 2	Section III A (Community and Regional Setting), Table 2, Map 1	pp 24, 42, 81
	Step 3	Section 4 (Background - Environmental Setting)	Vol I: pp 28-41
- Land Use, Ownership and	Step 2	Section III B (Inventory and Analysis) 1, -2, Table 1, Map 4, Map 5, C-3, Map 16, Appendix 3, 3.4	48-53, 99,100, 144
Zoning	Step 3	Section 7 (Implementation Strategy and Compliance)	Vol II: pp 86-134
- Brownfield, Abandoned and	Step 2	Section III C (Brownfield, Abandoned And Vacant Sites)	рр 79
vacant Sites	Step 3	Section 4 (Physical Context)	Vol I: pp 36-63
- Strategic Sites	Step 2	Executive Summary H, -N, Section III C-2, -E-3, Map 15, Appendix 4	pp 9-11, 17, 87- 97, 115-116, 176
- Parks and Open Space	Step 2	Section III B (Inventory and Analysis) 4, -5, Map 7, Map 8	pp 56-60
- Cultural Resources (Historic Sites and Archeologically Sensitive	Step 2	Executive Summary J-5, O3b, Section III B-6, Map 9, Map 10	pp 12, 19, 60- 61, 64-65
Areas)	Step 3	Section 8 (SEQRA Compliance)	Vol III: pp 8-9
- Visual and Aesthetic Resources	Step 2	Executive Summary O3c, Section III B10g, -F6b	pp 19, 75-76, 130
- Transportation Facilities and	Step 2	Executive Summary J6, Section III (Inventory and Analysis) B7, E4, -5, Map 11, Appendix 3	pp 12, 66, 69, 116, 117, 144
Iramic	Step 3	Section 4 (Transportation and Access)	Vol I: pp 88-95
- Infrastructure and Utilities	Step 2	Executive Summary J2,-J3 Section III B9, B10, Map 12	pp 11-12, 70-72, 74
	Step 3	Section 4 (Infrastructure)	Vol I: pp 96-99
- Existing Natural Resources and	Step 2	Section III (Inventory and Analysis) B10, C1b, Map 13, Map 14	pp 73, 77, 78, 81-84
Environmental Features	Step 3	Section 8 (Existing Conditions)	Vol III: pp 16-35
- Existing Economic Conditions	Step 2	Executive Summary K, Section III D	pp 13-14, 101- 112
	Step 3	Section 4 (Economic Context)	Vol I: pp 64-85
Impact Assessment and Mitigation	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 36

FIGURE 08.1 Index of GEIS contents
- Impacts on Land Use and Community	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 36-38
- Impacts on Natural Resources	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 38-41
-Impacts on Cultural Resources	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 42
- Visual and Aesthetic Impacts	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 43-47
- Open Space and Recreation	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 48
-Transportation Impacts	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 49
- Infrastructure and Utilities	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 50-52
- Impacts from Contamination	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 52-55
Consistency with NYS Coastal Policies	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Appendix A
Temporary and Short-term Impacts	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 55-57
Unavoidable Environmental	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 57
Commitment of Resources	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 57-58
Growth-Inducing Aspects	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 58-59
Alternatives	Step 3	Section 8 (Evaluation of Alternatives)	Vol III: pp 60-63
Thresholds for Future Review under SEQRA	Step 3	Section 8 (Thresholds for Future Review and Conditions for Future Actions)	Vol III: pp 64-65
References and Underlying Studies	Step 3	Section 8 (DGEIS References)	Vol III: pp 66

* Step 2 – City of Kingston, NY Waterfront Brownfield Opportunity Area, Step 2 Nomination, August 19, 2010 and Step 3 – City of Kingston the BOA Plan Sections 1-8, Draft September 2015

SEQRA PROCESS

Prior to commencing the environmental impact review process for the Project, the City conducted a series of procedural steps in accordance with SEQRA and its implementing regulations. This section provides a description of the those steps and procedures taken to comply with SEQRA while developing the BOA Plan, including the completed Environmental Assessment Form (EAF) (Appendix A) Parts 1 and 2; the Coordinated Review/Lead Agency Designation process; and the Determination of Significance – Positive Declaration.

ENVIRONMENTAL ASSESSMENT FORM

In December 2014 the City completed Parts 1 and 2 of the Full EAF and classified the Project as a Type 1 Action under SEQRA. The Project is considered a Type 1 Action because it is anticipated to:

- Involve adoption of the BOA Plan with prescribed land use components and/or recommendations for zoning changes to 25 or more acres;
- Involve the physical alteration of 10 acres of land or more;
- Involve Unlisted Actions within an area substantially contiguous to a National Registerlisted historic resources; and
- Involve publicly owned parkland (Kingston Point Park, TR Gallo Park and Block Park).

COORDINATED REVIEW/LEAD AGENCY DESIGNATION

Upon completion of the EAF and classification of the Project as a Type 1 Action (in accordance with 6 NYCRR 617.4), the City passed a resolution on January 6, 2015 proposing to seek SEQRA Lead Agency status for the adoption and implementation of the BOA Plan, and indicated its intent to conduct a Coordinated Review by requesting the consent from the other potentially Involved Agencies to the City serving as SEQRA Lead Agency.

The following Involved Agencies will be required to approve and/or adopt the BOA Plan:

- City of Kingston Common Council;
- City of Kingston Heritage Area Commission;
- New York State Department of State, and
- New York State Department of Environmental Conservation.

Potential future involved agencies that may have a permit, approval and/or funding role regarding implementation of the BOA Plan include:

- City of Kingston Planning Board;
- City of Kingston Zoning Board of Appeals;
- City of Kingston Local Development Corporation;
- Hudson Valley Greenway;
- New York State Department of Transportation;
- New York State Office of Parks, Recreation and Historic Preservation;

- State Historic Preservation Office (SHPO);
- Ulster County Planning Board;
- Ulster County Department of Public Works;
- · Ulster County Industrial Development Agency, and
- Ulster County Transportation Council.

POSITIVE DECLARATION

On February 10, 2015 upon receiving no objections from potentially Involved Agencies, the City assumed the designation as Lead Agency for the Project. The City's resolution also indicated the City determined that a DGEIS would be prepared. A notice for the public scoping meeting was distributed to involved agencies and published in the Environmental Notice Bulletin and local newspaper.

SCOPING

On February 24, 2015 a Public Scoping session was held in the Kingston City Hall. Scoping was held in conjunction with a public meeting to gather input on visioning for the redevelopment of the BOA (the Hudson Riverport Vision). Comments received during the scoping meeting and in writing (through March 10, 2015) that were relevant to the preparation of the DGEIS were summarized and are presented along with the Final Scope.

PUBLIC HEARING

A public hearing (in accordance with NYCRR §617.9(a)(4)) was held on November 12, 2015 as part of the community engagement activities for the BOA Plan.

RATIONALE FOR GENERIC EIS

The City determined that a Generic Environmental Impact Statement (GEIS) rather than a project-specific or conventional EIS is particularly well suited for the Project because the BOA Plan:

- represents a number of separate actions within the BOA study area, which if considered singly, may have minor impacts, but when considered together may have significant impacts; and
- is an entire program or plan having wide application that may have new or significant changes to affecting the range of future policies, projects and changes to land use, zoning or development plans.

For purposes of the BOA program, writing the BOA Plan to serve as the GEIS is an appropriate vehicle for SEQRA compliance. A GEIS offers several advantages for a BOA project such as setting forth specific conditions or criteria under which future actions will be taken or approved, including requirements for any subsequent SEQRA compliance. This may include criteria for Supplemental EIS(s) to reflect site-specific impacts from future projects that could not be adequately addressed in the GEIS at this time.

PROJECT DESCRIPTION

The Proposed Action subject to SEQRA is the intended adoption and implementation of the Hudson Riverport Vision Plan for the Kingston Waterfront BOA. This section summarizes the conceptual redevelopment plans presented in the BOA Plan, which satisfies the SEQRA requirements in NYCRR §617.9(b)(5)(i). Additional detail describing the proposed development plan is found in Section 6.

The BOA Plan guides revitalization and redevelopment of the approximately 190-acre BOA (land area), including possible remediation of several strategic brownfield sites adjacent to the Hudson River and Rondout Creek waterfronts, public parkland (Block Park and Kingston Point Park), residential areas, commercial and public facilities. The purpose of the BOA Plan is to build upon the Local Waterfront Implementation Plan (2002) and proposed City of Kingston Comprehensive Plan (2015) to create redevelopment opportunities on former industrial brownfields. The BOA is generally bounded by the waterfront along Rondout Creek from Island Dock to its confluence with the Hudson River at Kingston Point, generally south of Abeel Street and East Strand Street.

PROPOSED EXPANSION OF BOA BOUNDARY

During Step 3 the City determined to expand the BOA boundary to better take advantage of additional brownfield sites whose redevelopment would serve as catalyst projects for the revitalization of the greater BOA. The proposed expanded area includes 12 parcels, approximately 23.6 acres (including water area) at the east end of the BOA.

All the parcels within the proposed extended BOA boundary are located either on Rondout Creek or front on Abeel Street. The subject area is bounded at the west by the former Block Plant property on Abeel Street. Abeel Street bounds the subject parcels to the north from the former Block Plant Site at the west to its east end at 144 Abeel Street (abutting the current BOA boundary). Rondout Creek serves as the southern bounds of the proposed extension of the BOA boundary. The subject parcels have been grouped into five areas based on common ownership or existing use. Figure 04.4 in Chapter 4 lists the parcels within the proposed extended boundary, which are also depicted on Figure 04.3.

JUSTIFICATION FOR THE PROPOSED CHANGE TO BOA BOUNDARY

The proposed area for the BOA boundary extension is an organic extension of the BOA originally studied in Step 2. Each of the five groupings offers unique opportunities for brownfield redevelopment. The expansion area includes a group of vacant and underutilized properties previously studied and cleared for redevelopment (the Noah Hotel Site – sites 1-5). The Hideaway Marina is an existing water-dependent business with excellent access, no major environmental issues and several ancillary buildings. The P&T Surplus property (sites 8 and 9) is an underutilized property that does not have significant contamination concerns based on a Phase I Environmental Site Assessment does not have significant contamination concerns. Site 12 includes the former Block Plant. The former Block Plant and associated parcels (sites 11 and 12) are part of the same holdings as Island Dock, which has significant potential for redevelopment as a water-dependent site. The

available environmental site assessments indicated there is low to moderate potential for degraded environmental conditions.

Taken together, the 12 subject parcels make a reasonable extension to the Kingston Waterfront BOA that would incorporate the entire slipway on Rondout Creek up to and including the causeway. Site Profiles have been prepared for each of the five groupings of parcels within the proposed extended BOA boundary and are provided in Section 4 (Site Profiles). It is noted that several narratives in Step 2 Nomination Study refer to Block Park, even though it was not included within the original BOA boundary.

HUDSON RIVERPORT VISON PLAN - STRATEGIC SITES

The Step 2 Nomination Study (Section III.E.5) (Proposed Waterfront Land Uses) describes the preferred future land uses identified at that time. Step 2 also presented a conceptual land use plan graphically on a figure titled Kingston Waterfront Development Implementation Plan. However, since completion of the Step 2 Nomination Study, the Steering Committee has taken further steps to refine and detail the future plan, resulting in the Hudson Riverport Vision Plan. The Design Strategy in Section 6 provides greater detail on anticipated land uses along the entire BOA corridor as well as for each of the five selected strategic sites, which are summarized in this section.

Based on information gathered and analyzed, priority sites having the greatest redevelopment potential and the least environmental constraints were identified in Step 2 and refined in Step 3. Strategic brownfield sites were chosen for their: overall importance to the community and the revitalization effort; location; ownership and owner willingness to redevelop; on-site structures; level of known of potential contamination; property size and capacity for redevelopment; potential to spur additional economic development or positive change in the community; potential to improve quality of life or to site new public amenities; community support for proposed projects for the site; and adequacy of supporting or nearby infrastructure, utilities and transportation systems. In the Step 2 document in Map 15 (Strategic Sites) the original strategic sites are shown, which have been expanded to include the Block Park / Island Dock site and the Noah Hotel Site. The revised Strategic Sites are shown in this Step 3 BOA in Section 6.

The Strategic Sites include:

KOSCO ASSEMBLAGE

This waterfront site is 4.1 acres located on the south side of East Strand. It is currently used by local artisans as well as the NY State Police, Ulster County Sheriff's Department and NY DEC to dock emergency response vessels. Two new development sites can be created outside of the flood plain. Each building will be mixed-use with retail space at the ground floor and residential above. Buildings range from three to four stories and provide a range of unit types including market rate, senior housing, artist lofts and affordable units.

The total preferred long-term development will be 60,000 square feet of commercial space including 38 residential units.

THE LANDING

Kingston Landing is a 3.8 acre site of vacant land and marshland located at the mouth of the Rondout Creek. The site has 215 feet of frontage along the east side of North Street. There is a boat launch ramp to Rondout Creek at the southwest corner of the property. Approximately half of the parcel is submerged at high tide.

The BOA Plan recommends reuse of the Landing property as a destination project that will take advantage of its prominent location, such as a restaurant, retail and cultural uses. The proposed development on the site will be a focused single two to three story building that creates a mixed-use trolley terminal with retail and cultural space. This trolley stop will become the major hub for the eco-hotel destination (at Millens property) and will provide opportunities to access the waterfront, day-liner trail and the lighthouse trail.

The total long-term development for this preferred option is 55,000 SF of mixed-use commercial and entertainment space.

MILLENS & SON SCRAP METAL RECYCLING

The Millens & Son Scrap Metal Recycling site (Millens site) is a 2.2 acre site located on the north side of East Strand Street. The site includes a small brick and concrete block structure built at the front of the parcel that is currently used for vehicle and equipment maintenance and storage.

The preferred option will be to combine the site with adjoining properties to create a destination 40 key eco-hotel site. These sites include private and public lands that primarily consist of condemned houses that have sustained flood damage beyond repair. The hotel will be a one to two story single structure that will house common facilities such as check-in, restaurant, meeting space, offices, and back-of-house services. The guest rooms would be small bungalows sited along the boardwalk.

The total long-term development for this preferred option is 35,000 square feet of commercial space and the 40 hotel units.

BLOCK PARK/ ISLAND DOCK

This strategic site includes both Block Park and Island Dock. Block Park is a 7-acre site located between Abeel and Ravine Streets and the inner channel of Rondout Creek from Island Dock. Block Park is currently a City operated public park and includes a softball diamond, basketball courts, handball courts, a pavilion, picnic area, playground and restrooms. Island Dock is a privately owned 17-acre manmade island. Currently, the island is heavily vegetated and is under-utilized.

The preferred option would be that Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) be purchased by the City of Kingston, possibly with the participation and/or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition. The Block Park parcel will be primarily a residential development with ground floor retail opportunities in the eastern-most buildings.

The Greenline (described in Section 6) will extend from Ravine Street, west along the water, to the Island Dock entrance. There could also be a network of pedestrian walkways. The existing softball diamond in Block Park could be relocated to the southwest corner of the parcel. A parking lot could be located adjacent to the softball diamond at the site of the former Block Plant. A small amphitheater could be located at the eastern tip of the island to provide a venue for musical and theater performances and/or outdoor movies. A pedestrian bridge could connect the Island to Hone Street on the mainland. The bridge would be elevated to allow the passage of boats.

The total long-term development of the preferred option is 538,000 SF of residential (321 units) and retail as well as open space and recreation facilities.

NOAH HOTEL SITE

The proposed Noah Hotel site is situated between Abeel Street and West Strand Street. The proposed hotel will have frontage and access on both the upper level (Abeel Street) and West Strand to capture the traffic from the waterfront promenade. The site would offer retail for recreational boaters and a restaurant overlooking Rondout Creek. An additional two to four story commercial building will be co-located on the site to provide maritime focused office space and support industry. A series of public terraced landscape space will be located between the two buildings to create a green connection between the upper and lower levels. Parking will be incorporated for the hotel guests which could also offer a larger district-wide parking strategy option by providing a municipal garage with parking designed into the hillside.

The total long-term development for the preferred option will be 272,500 square feet of mixed retail, office and marine support services, and includes a 150 key hotel.

POTENTIAL PROJECT ACTIVITIES

Based on the Design Strategy, the revitalization of the Kingston Waterfront BOA will primarily be implemented by private landowners through a series of future redevelopment projects which are conceptually identified and described in the Design Strategy for the BOA Plan. At the conceptual level the BOA Plan identifies the following key or catalyst projects:

- Events (food and cultural);
- Wayfinding;
- Critical Infrastructure;
- Irish Cultural Center and Maritime Museum Boat Building School;
- · Eco-hotel at the Millens & Sons Strategic Site;
- · Waterfront Connections and Bulkhead Enhancements;
- · Complete Street Improvements and Multimodal Connections;
- Greenline Construction;
- Island Dock Park;
- Regional Park/ Destination Playgrounds;
- Cut Fill Remediation and Adaptive Edge Development;
- · Food/Culture Hub at the Cornell Building;
- 150 Key Hotel at the Noah Hotel strategic site;

- Western Anchor Development, and
- Promenade and Trolley Line Extension.

PHASING STRATEGY

It is anticipated that redevelopment of the Kingston Waterfront in accordance with the BOA Plan will occur in several multi-year steps, as presented in Section 6 of the BOA Plan. The anticipated phases include:

PHASE 0 (0-2 YEARS)

- Pop-up park
- Food events
- Wayfinding and signage
- Art, antiques and other cultural events

PHASE 1 (2-5 YEARS)

Commercial	5,000 sf	
Retail	5,000 f	
Hotel	0 sf	
Civic	20,000 sf	Irish Community Center
Residential (area)	10,500 sf	Planned Residential Conversion of Church
Residential (units)	9 units	1200 sf per unit
Surface Parking	15 spaces	(not included in area estimate)
Structured Parking	0 spaces	
TOTAL	40,500 SF	

FIGURE 08.2 Total Phase 1 development

PHASE 2 (5-10 YEARS)

Commercial	0 sf	
Retail	131,500 sf	includes grocery store
Hotel	32,000 sf	40-key eco-hotel
Civic	0 sf	
Residential (area)	12,000 sf	
Residential (units)	10 units	1200 sf per unit
Surface Parking	160 spaces	(not included in area estimate)
Structured Parking	200 spaces	assume 325 sf per space
TOTAL	240,500 SF	

FIGURE 08.3 Total Phase 2 development

PHASE 3 (10-20 YEARS)

Commercial	235,000 sf	
Retail	110,500 sf	
Hotel	120,000 sf	150 key hotel, Assumes 850sf per key to capture common space
Civic	91,000 sf	
Residential (area)	103,500 sf	
Residential (units)	86 units	1200 sf per unit
Surface Parking	81 spaces	(not included in area estimate)
Structured Parking	300 space	assume 325 sf per space
TOTAL	757,500 SF	

FIGURE 08.4 Total Phase 3 development

PHASE 4 (20+ YEARS)

	Change A david an manut	
TOTAL	618,250 SF	
Structured Parking	250 spaces	assume 325 sf per space
Surface Parking	45 spaces	(not included in area estimate)
Residential (units)	321 units	1200 sf per unit
Residential (area)	385000 sf	
Civic	0 sf	
Hotel	0 sf	
Retail	31,000 sf	
Commercial	121,000 sf	

FIGURE 08.5 Total Phase 4 development

For the purposes of this generic environmental assessment, where appropriate impacts are considered cumulatively at full build-out as shown in Figure 08.6

Commercial	361,000 sf	
Retail	278,000 sf	
Hotel	152,000 sf / 190 key	
Civic	111,000 sf	
Residential (area)	511,000 sf	
Residential (units)	426 units	
Surface Parking	301 spaces	(not included in area estimate)
Structured Parking	750 spaces	
TOTAL	1,656,750 SF	
Civic Residential (area) Residential (units) Surface Parking Structured Parking TOTAL	111,000 sf 511,000 sf 426 units 301 spaces 750 spaces 1,656,750 SF	(not included in area estimate)

FIGURE 08.6 Total development

ENVIRONMENTAL SETTING – EXISTING CONDITIONS

This section includes a concise summary to describe several existing conditions in the 190-acre BOA. This section includes descriptions of:

- Community and regional setting;
- Existing land use, ownership and zoning;
- Brownfield, abandoned and vacant sites;
- Strategic sites;
- · Parks and open space;
- Building inventory;
- · Historic and archeologically sensitive areas;
- Transportation systems;
- Infrastructure and utilities;
- · Natural resources and environmental features, and
- Economic conditions and market trends.

This section satisfies the SEQRA requirement for a description of the existing environmental setting as stated in 6NYCRR §617.9(b)(5)(ii). Additional detail describing the environmental setting is found in the BOA Step 2 Nomination Study, as updated in the Step 3 documents.

COMMUNITY AND REGIONAL SETTING

The community and regional setting are described in the Step 2 Analysis of the Proposed BOA - Section III.A which includes: regional context, demographics, overview of the City of Kingston, socio-economic conditions; housing, transportation and commuting patterns; existing infrastructure; and existing natural features. The local and regional context is updated in the BOA Plan Section 4 (Background - Environmental Setting).

EXISTING LAND USE, OWNERSHIP AND ZONING

Existing land use is shown on Map 4 and described in Step 2 Section III.B.1 of the Step 2 Nomination Study. Land Use has been updated in BOA Plan Section 4 (Physical Context). Land use categories are defined in BOA Plan Section 6 (Land Use). An updated land use map is also presented in BOA Plan Section 4 (Physical Context).

The BOA Plan includes a number of different land uses. For the purposes of the BOA Plan land uses are categorized as follows:

Residential - low to medium density households that provide a range of user types such as, market rate, affordable units, senior housing, artist lofts and live-work.

Mixed-Use Commercial/Residential -Typically multifamily residential buildings with stores and/or neighborhood services on the ground floor. Mixed-use buildings with both offices and residences are possible; however no commercial space can be on a higher floor than a residential unit.

Commercial - Job generating spaces that are typically cleaner than industrial space. These spaces are commonly office space, retail and flexible desk spaces.

Mixed-Use Commercial/Civic/Residential - This allows for the largest spectrum of uses and allows new developments to respond to the market demand. It is intended to be cleaner than industrial uses and provides enough flexibility to help establish core mixed-use communities. Commercial is not restricted to just lower floors and instead, if the market can absorb it, any mix of the building could be incorporated.

Hotel - Hotels are places of lodging that provide sleeping accommodations and supporting facilities.

Industrial - Reserved for manufacturing, transportation, utilities and storage uses.

Park/Open Space - Open space is any open piece of land that is under developed and is accessible to the public. These spaces are typically seen as assets and opportunities for recreation and access to nature.

The land use categories that occupy the most land area within the BOA are Parks and Open Space (105 acres / 55 %) and Industrial (22.5 acres / 12 %). In addition, much of the land area land is vacant (40.9 acres / 21 %), or underutilized surface parking and scattered vacant or underutilized industrial parcels. Industrial uses include the HeritagEnergy Terminal, a marina and vacant industrial lands. Former uses include a metal fabricator, two auto/metal recycling facilities, and two tanks. Commercial and non-profit uses include a restaurant and three museums including trolley, and maritime museums and KOSCO dockage by state agencies. Other than the marinas and maritime museums, few of the businesses are water-dependent or related uses. It is noted that the total area within the BOA boundary is approximately 419 acres, including 190 acres of land area and 229 acres of water outside boundaries of land parcels. – Figure 08.7 provides a breakdown of existing land use categories by area.

LAND USE	EXISTING AREA (ACRES)
Residential	2.5
Vacant	40.9
Mixed-Use Commercial/Residential	0
Commercial (including Hotel and Parking)	0.6
Recreation/Entertainment	4.1
Public Services	6.3
Community	2
Industrial	22.5
Parks/Open Space	105
ROW and other uses	6.1
Total land area	190.0

FIGURE 08.7 Existing Land use

EXISTING LAND OWNERSHIP

The Existing Land Ownership is shown on a Map 16 and described in Section III.C.3 of the Step 2 Nomination Study. Much of the land area in the BOA is owned by the City of Kingston (112 acres / 59%). These lands play an important role in the redevelopment plan since they include public park land (including waterfront access) and public infrastructure and include Block Park, Kingston Point Park and the Sewage Treatment Plant. These sites are included in the BOA because they directly contribute to and/or influence the redevelopment potential of the area. The land ownership pattern is summarized in Figure 08.8 to reflect the additional parcels included in the proposed expanded BOA boundary.

OWNERSHIP	NO. OF PARCELS			AREA (APPROX. ACRES)		
	Step 2 BOA	Expanded Boundary	Total Parcels	Step 2 BOA	Expanded Boundary	Total Land Area*
Private	74	11	85	67	11	78
Public (City of Kingston)	13	1	14	95	7	102
Road Right of Way	-	-	-	10	<1	10**
Total Waterfront BOA	87	12	99	172	18	190

FIGURE 08.8 Land ownership

*includes water portion within parcel boundaries

** does not count 2 acres of City and ROW that are "double counted"

EXISTING ZONING

Chapter 405 of the City of Kingston Code provides the primary land use regulation in the City, including within the BOA. The existing zoning is described in Section B.2 of the Step 2 Nomination Study and is presented on Map 5. The existing zoning districts within the BOA include:

- RF-R (Rondout Creek District)
- RF-H (Hudson Riverfront District)
- RRR (residential district)
- M-2 (General Manufacturing)
- C-2 (General Commercial)

As-of-Right, or "Permitted" uses allowed in each district are listed in a table on page 51 of the Step 2 Nomination Study. The Step 2 Nomination Study also indicates that a considerable amount of land is occupied by active businesses that are non-conforming uses according to current zoning. The uses called for in the preferred development scenarios fit within the existing zoning districts and do not require significant amendment to the allowed uses in those districts.

Other relevant local land use laws that guide development within the BOA are described in Sections 4 and 7 of the BOA Plan include:

• Control of "Waterfront Facilities" codes under the Kingston City Harbor Manager.

- Waterfront Consistency Regulations under the City of Kingston Local Waterfront. Revitalization Program.
- 2006 City of Kingston design guidelines.
- City of Kingston Waterfront Zoning Regulations.

BROWNFIELD AND FORMER INDUSTRIAL SITES

This section summarizes what is known to-date about the existing brownfield and former industrial sites within the BOA, including known potential contamination issues. This summary is based on existing or historical records, existing remedial investigations, studies and reports reviewed or prepared as part of the Step 2 Nomination Study. Map 3 (Underutilized Sites) in the Step 2 Nomination Study depicts the location of relevant known brownfield sites and other vacant sites within the BOA.

A comprehensive environmental audit was prepared during 2002-2003 by the Mid-Hudson Land Revitalization Partnership. For the audit, the BOA was broken into three separate "environmental evaluation sectors" which were grouped geographically and shared unique characteristics that distinguished them from the other sectors. The audit covered 27 clusters on the Rondout Creek and Hudson River waterfronts in the City of Kingston; all within the BOA. The audit was part of a U.S. Environmental Protection Agency Brownfields Pilot Project.

The overall conclusion of the audit was that all of the parcels evaluated as part of Kingston's BOA program have some potential environmental problems related to previous industrial uses. Also, there may also be construction-related issues due to the nature of the materials that were used to build up the lands along the Hudson River and fill in large portions of the waterfront areas. As stated in the Step 2 Section III.C, it is anticipated that degraded environmental conditions typical of the region can be remediated using readily available, traditional cleanup alternatives. Detailed information regarding the audit is provided in the Step 2 Nomination Study, Section III.C.

Based upon the Phase I Site Assessments, the City of Kingston and its partners identified three priority assemblages to designate as Strategic Sites in the Step 2 BOA Nomination. Appendix 4 (Additional Environmental Site Assessments) of the Step 2 Nomination Study provides the Environmental Site Assessments (ESA) which were performed in 2008 for The Landing and the KOSCO property. These sites are shown on – Figure #15 (Strategic Sites Map) in the Step 2 Nomination Study. The Environmental Site Assessment for the third identified priority assemblage, the Millens site, could not be completed at that time due to it being under Consent Order with the New York State Department of Environmental Conservation (NYSDEC).

The existing contamination showing prior usage history of the BOA parcels is presented on the Contamination Map in Section 4.f (Known Environmental Conditions) of the Step 2 Nomination Study. This map highlights varying degrees of environmental conditions. Contamination along the Kingston waterfront may include heavy metals, dissolved inorganic pollutants, persistent organic pollutants, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). Any such contamination is capable of remediation and not an obstacle to redevelopment.

The Potential Contamination Type Map, presented in Section 4.f of the Step 2 Nomination Study, illustrates potential, historic and current possible contamination of the BOA parcels.

STRATEGIC SITES – ENVIRONMENTAL REMEDIATION OPPORTUNITIES

KOSCO ASSEMBLAGE

Contamination issues for the KOSCO Assemblage site (KOSCO) are identified and discussed in the Step 2 Nomination Study (Map 15 - Strategic Sites and Appendix 4). Previously, the KOSCO site was the base for 25 technicians for residential and commercial heating customers and a marine fueling terminal. The bulk petroleum storage tanks have since been removed from the site. The site is surrounded by a chain link fence and includes four one-story structures. The site is currently used by local artisans as well as by the NY State Police, Ulster County Sheriff's Office and NY DEC to dock emergency response vessels.

Groundwater monitoring wells were noted throughout the property during the site visit (conducted as part of the 2001 Phase I ESA), as well as stained soils in areas of the former bulk storage tank areas. This site has had a history of responsible operation by onsite managers. Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

THE LANDING

As presented in the Step 2 Nomination Study (Section III.C.2.b.i and Appendix 4), a Phase I ESA was performed at the site in 2001. The ESA identified the presence of construction debris and unknown fill material onsite; the site was formerly used as a marina which may have included fuel storage as part of its operations; and there is a potential that contaminated groundwater from the adjacent site (former manufactured gas plant) may have migrated to the Landing site. Based on the 2001 ESA, a 2005 Site Characterization Investigation of the site was performed. The investigation identified Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds SVOCs and elevated metals exceeding New York State Department of Environmental Conservation (NYSDEC) standards were found in soil and groundwater on the western one-third of the property (possibly attributed to the current and historic operations of the western and northern adjoining properties). Any contamination emanating from adjoining property owners is the responsibility of those adjoining property owners to remediate.

Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

MILLENS & SON SCRAP METAL RECYCLING

According to the 2008 Phase I ESA performed for The Landing Site (Appendix 4 of the Step 2 Nomination), Millens Scrap Yard is identified as a delisted Inactive Hazardous Waste Disposal Site. This facility (site code 57480) has soils contaminated with Polychlorinated Biphenyls (PCBs), petroleum, and metals. Groundwater is also

contaminated at the site and the plume has migrated off-site. The site is also listed as a Petroleum Bulk Storage, Chemical Bulk Storage, and Aboveground Storage Tank site. Six spills were reported at the Millens scrap yard. The spills mainly involved oil run-off associated with car crushing operations, with one spill associated with an unknown 55-gallon drum. One of the spills (NYSDEC ID 9604764) from the car crushing operation remains open in the NYSDEC database. There is known contamination at this property associated with the car crushing operation (Appendix 4 of the Step 2 Nomination).

There have been several investigations performed since 1996 at the site to delineate the location and depth of contamination. A Remediation Investigation/Feasibility Study was submitted in 2004 including recommendations for excavation of the PCB-contaminated soil, active in-situ remediation of VOC contaminated soil, and eventual capping of remaining areas. Soil vapor extraction was required to be completed and operational by April 2005. During June and July 2007, additional soil investigations were performed. The results of this investigation found one VOC in one location, SVOC exceedances in subsurface soils, and metals. Barium, chromium, lead, VOCs, benzene and Methyl Tertiary Butyl Ether (MTBE) were detected in groundwater at several wells. SVOCs were detected in an off-site well. In June 2008, the NYSDEC listed the site as a Class 2 Inactive Hazardous Waste Site. NYSDEC performed a Remedial Investigation of the site during 2012 to 2013. VOCs, SVOCs, metals, and PCBs were detected in surface and subsurface soils off-site. VOCs were detected in groundwater in the southern portion of the site.

In May 2015, a Citizen Participation Plan was generated for the site. According to the Plan, an Interim Remedial Measure for in-situ treatment of groundwater and residual soil contamination at the site is currently being developed under a NYSDEC Consent Order.

BLOCK PARK / ISLAND DOCK

Upon a search of the NYSDEC Spill Incidents Database, there was one spill listed for this site. Spill #0906182, Block Park, is listed as a raw sewage spill in the soil which occurred on August 8, 2009. The spill was closed on August 8, 2009.

Phase I and Phase II Environmental Assessments were performed for the Block Plant and Island Dock sites. According to the Limited Phase II Environmental Site Assessment, Former Concrete Block, Inc. Facility (Island Dock), Kingston, New York, July 2005, environmental conditions for the sites include: historical use of the site as a coal storage yard; electric transformer casings that may have impacted surrounding soil on the island; scrap metal and wood debris located onsite; and petroleum releases were noted in nearby areas.

The Phase II field investigation at the former Block Plant facility and Island Dock site consisted of Geoprobe[™] borings and test pits to collect surface and subsurface samples. A supplemental round of surface soil sampling was also performed following the initial field work. The analytical results of the field investigation resulted in the detection of VOCs and SVOCs in the surface soils. Metal concentrations along with SVOCs were detected at levels marginally exceeding their respective NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 Criteria. The most likely remediation plan at Island Dock will be installation of a membrane

covered with soil capping.

SVOCs were found at both the former Block Plant Factory and the Island Dock site. SVOCs were also detected in the location of a former aboveground petroleum storage tank.

Evidence of coal and coal slag were found in borings obtained from the Island Dock site. Low-levels of VOCs were identified in the area of the former Block Plant Factory.

The Island Dock site is currently in the Brownfields Cleanup Program (Voluntarily). Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

NOAH HOTEL

A search of the NYSDEC Spill Incidents database found that there was one reported spill associated with the site. The spill is listed in the NYSDEC Spill Incidents Database as Construction Site/AKA Noah Hotel. The spill is dated October 28, 2005 and was identified as unknown petroleum. The spill was closed on January 20, 2010. At this time, there is there are no additional environmental records or known environmental investigations related to this site.

PARKS AND OPEN SPACE

Existing parks and open space are identified and described in detail in the Step 2 Nomination (Section III.B.4) and presented on Map 7 of that study – Parks and Open Space and is further discussed in this Step 3 document in Section 4 (Background - Environmental Setting). There are three parks within the BOA area which total approximately 105 acres of open space.

Existing parks include:

- Kingston Point Park and Kingston Beach
- TR Gallo Waterfront / West Strand Park and Rondout Landing Dock
- Block Park (included in the proposed BOA boundary expansion)

Located outside the BOA but in close proximity are:

- Kingston Urban Cultural Park
- Hasbrouck Park
- Cornell Park

BUILDING INVENTORY

An inventory of key buildings is provided in the Step 2 Nomination (Section III.B.5) which describes key structures assessed at that time and presented on Map 8 of that Plan. This BOA Plan provides an update of key buildings, and expands the building inventory in Section 4.a with the description of the proposed BOA boundary extension. Key existing structures include:

- The Hudson River Maritime Museum;
- Boat-building school in an annex to the Hudson River Maritime Museum (formerly Rosita's Restaurant);
- Kingston Trolley Museum;
- The Millens Steel and Fabricating Service, Inc. (currently Ole Savannah Restaurant) (NRHP eligible);
- Cornell Steamboat Company Shops (NRHP eligible);
- · City of Kingston Waste Water Treatment Plant;
- Rondout Lighthouse (NRHP listed);
- Sampson Opera House;
- Abandoned brick building, 144 Abeel Street (in proposed BOA extension);
- Hideaway Marina (various buildings), 170 Abeel Street (in proposed BOA extension);
- P&T Surplus, 194 and 198 Abeel Street (in proposed BOA extension), and
- Former Block Plant 320 Abeel Street (in proposed BOA extension).

HISTORIC OR ARCHEOLOGICALLY SIGNIFICANT AREAS

An inventory of historic sites and buildings is provided in the Step 2 Nomination Study (Section III.B.6) which describes historic and archaeologically sensitive areas and is also presented on Maps 9 and 10 of the Step 2 Nomination. The BOA Plan provides a list of historic districts and landmarks, historic structures, buildings eligible for National Register Listing and historic resource surveys.

Historic districts and landmarks located within the BOA that are listed in the National Register of Historic Places include:

- Rondout/West Strand Historic District: An area of National Register properties, ca. 1825.
- Part of the Chestnut Street Historic District: An area of late 19th-century National Register properties.
- Port Ewen Suspension Bridge.
- Rondout Lighthouse: Ca. 1915, located off Kingston Point.
- S. & W. B. Fitch Bluestone Headquarters: This Kingston-designated landmark, now a residence, once served as the office of a leading local industry.

Historic structures that are City landmarks of importance to the history of Kingston and the development of industry on the Hudson River include the following:

- Wilbur Neighborhood: Distinctive waterfront community.
- West Shore Railroad Trestle: Ca. 1895, this trestle continues to provide major rail service in the region.
- Island Dock: A man-made island in the Rondout Creek, originally designed for the transfer of coal.
- Millens Steel Building (Steelhouse Restaurant): Ca. 1870, originally a boiler shop for the shipbuilding industry.
- Ponckhockie Union Congregational Church: A cast-concrete, late 19th century structure.

Buildings that may be eligible for listing in the National Register of Historic Places include:

- Millens Steel Building (Steelhouse Restaurant).
- Cornell Steamboat Shops: This NRHP-eligible property represents one of the major 19th-century industries in the area.

HISTORIC RESOURCE SURVEY

The Ponckhockie neighborhood adjoins, but is not within the BOA. Although the Ponckhockie neighborhood has not been listed in the National Register, a portion of it was identified as a supplemental preservation area in the Urban Cultural Park Management Plan in 1987. The Ponckhockie neighborhood was included in a formal historic resource survey conducted during the preparation of the City of Kingston's Urban Cultural Park Management Plan in 1987. As described in Section III.B.6d of the Step 2 Nomination Study; of approximately 138 buildings surveyed in the Ponckhockie neighborhood (including East Strand and North streets); approximately five buildings were considered to be of major importance with few alterations.

Based on this survey, the Management Plan recommended that Ponckhockie (and the Wilbur neighborhood) "be developed as an educational and interpretive tool for the Kingston Urban Cultural Park." It also identifies the Ponckhockie neighborhood as an important "peripheral area" that complements Kingston's National Registerlisted historic districts and core areas of the Heritage Area, and provides additional opportunities for interpretation and economic development. As a result, the Management Plan notes that the preservation and revitalization of the Ponckhockie neighborhood is a high priority objective of the Heritage Area.

ARCHAEOLOGICALLY SIGNIFICANT AREAS

Utilizing the NYS Office of Parks, Recreation and Historic Preservation's (OPRHP) on-line tool; Cultural Recourse Information System (CRIS); it was determined that the entire BOA area is located within an archaeologically sensitive area(s). Correspondence regarding archeologically sensitive sites within and surrounding the BOA was initiated with the Division for Historic Preservation within OPRHP on April 8, 2015. A response letter from OPRHP was received on April 15, 2015 stating that there is a potential for future redevelopment in the Study Area to impact archaeological and/or historic architectural resources.

TRANSPORTATION SYSTEMS

ROADWAYS

Roadways are assigned a functional classification based on the role they play in serving the flow of traffic through the roadway network. The functional classification system is divided into three main categories Arterials, Collectors, and Locals. These categories are then divided into sub-categories to stratify the range of mobility and access functions that roadways serve.

Frank Koenig Blvd. (U.S. Route 9W) is an Urban Principal Arterial Other running north-south along the western edge of the Hudson River. It crosses Rondout Creek near the center of the BOA. It is a four-lane divided roadway with auxiliary turning lanes at the intersections in the area. The posted speed limit is 45 MPH in the area.

Broadway's functional classification changes within the city of Kingston. It is an Urban Principal Arterial from Albany Avenue to Delaware Avenue. It then continues as an Urban Minor Arterial to its intersection with McEntee Street. At this point, it changes to an Urban Major Collector ending at Roudout Landing near the Rondout Creek. The speed limit on Broadway is 30 MPH; the city wide speed limit.

Abeel Street is an Urban Major Collector from Wilbur Avenue (NY Route 213) to Broadway and follows the Rondont Creek. The posted speed limit is the city wide speed limit of 30 MPH. Abeel Street connects with Rondout Landing, East Strand Street, West Strand Street, and Dock Street to form an east-west corridor for the entire BOA.

Rondout Landing begins at the foot of Broadway as an Urban Major Collector. The name of the road changes at the trolley tracks to East Strand Street and continues to North Street as an Urban Major Collector.

West Stand Street is a two lane Urban Major Collector following Rondout Creek between Broadway and Dock Street. Dock Street has one lane continuing from West Stand Street to Abeel Street, and is classified as an Urban Major Collector.

Wurts Street is a north-south Urban Minor Arterial which crosses Rondout Creek using the Port Ewen Suspension Bridge. The posted speed limit is 30 MPH.

McEntee Street is an Urban Minor Arterial from Broadway to Wurts Street. At the intersection with Wurst Street it continues southwest as an Urban Major Collector.

Garraghan Drive is an Urban Major Collector that connects US 9W to Broadway. The posted speed limit is 30 MPH. It is a two lane road with a curb center median. There are auxiliary turning lanes at the intersections.

INFRASTRUCTURE AND UTILITIES

This section describes the location, extent, condition and available capacity of existing infrastructure and utilities (water, sewer, wastewater treatment and stormwater, etc.).

EXISTING PUBLIC WATER SUPPLY (PWS)

The source of the public water supply is the City of Kingston Water Department (KWD). The service area for the KWD includes the City of Kingston and portions of the Town of Ulster and serves $\pm 24,000$ people through $\pm 7,900$ service connections.

The primary source of water is the Mink Hollow watershed in the Catskills which is piped into the ± 1.2 billion gallon Cooper Lake Reservoir in Lake Hill, NY. Water then is processed at the Edmund T. Cloonan Water Treatment Plant which has a nominal production capacity of approximately 8 million gallons per day (MGD). The average daily flow into the KWD system is ± 3.5 - 4 MGD. The peak daily flow of up to 4.7 MGD typically occurs in July.

KWD's current Capital Improvement Plan calls for more than \$18 million in capital projects over the next five years including infrastructure improvements at Cooper Lake and the treatment plant.

BOA EXISTING PUBLIC WATER SUPPLY FACILITIES

The KWD owns, operates and maintains the public water system in the BOA. The existing PWS system includes a network of distribution pipes, fire hydrants and individual service connections. The KWD distribution system in the BOA consists of pipe sizes ranging from 4" to 12" diameters. The typical static pressure in the system along Abeel and East Strand Streets is ±120 pounds per square inch (PSI) which is generally the highest pressure zone in the KWD system.

- East Strand: North side of the road, 12" cast iron crosses to south side of road at New Central Baptist Church 216 E. Strand.
- East Strand at Gill: 12" cast iron south side next to 8" gas.
- · East Strand Waterline continues on North Street past to Delaware.
- Abeel St. south side to block plant.

Many of the existing waterlines in the BOA are cast iron pipe (CIP) which has a nominal service life of approximately 75 - 100 years. The date of installation of the existing waterlines varies. However, some of the existing waterlines in the BOA are believed to be over 100 years old. CIP was widely used for waterlines through the 1950's until ductile iron and PVC became the standard pipe materials by the 1960's. Therefore, it is assumed that many of the waterlines in the BOA are at or near the end of their useful life and would be planned for full replacement concurrent with street improvement projects or redevelopment projects.

PWS UN-SERVED AREAS

Island Dock is not served by any active public water facilities.

EXISTING PUBLIC SANITARY SEWER SYSTEM

The City of Kingston owns and operates the public sanitary sewer system in the BOA consisting of gravity sewers, pump stations, force mains and siphons. The sewer system is generally a combined sewer system which collects and treats both sanitary wastewater and stormwater flows. With the exception of the combined sewer overflows, all of these facilities discharge to the Kingston Waste Water Treatment Facility on East Strand Street for treatment and discharge to Rondout Creek.

BOA EXISTING SANITARY SEWER FACILITIES

BOA PUMP STATIONS

The BOA is tributary to four existing pump stations. Pump stations #4, #11 and #12 each convey wastewater to gravity sewers on East Strand Street which then discharge to a fifth pump station #17 at the Wastewater Treatment Facility (WWTF). Pump station #13 discharges directly to the WWTF through a combined force main from PS #14 and #15 outside the BOA.

- PS #4 North Street and Delaware Avenue (Kingston Point Park); Capacity ±350 gpm, 6" force main. Discharges to 15" gravity sewer at East Strand and North Street, then PS #17.
- PS #11East Strand and North Streets: Capacity ±35 gpm. PS #11 is a 2 HP grinder pump station which serves the properties on the east side of North Street (Millens), Rondout Land Corp) and has a 2.5" force main which discharges into the 15" diameter East Strand sewer, then to PS #17.
- PS #12Broadway and East Strand Street (30 Rondout Landing): Serves lower south end of Broadway and West Strand Street. Ultimately discharges to East Strand gravity sewer and on to PS #17. Low capacity (2 hp submersible pump), 4" force main.
- PS #13Abeel Street at Block Park: Serves west end of German Street and intersection with Abeel Street (Block Park). Discharges directly to WWTP by way of the combined force main from PS #14 and #15. Capacity ±220 gpm, submersible, 6" & 8" force main.
- PS #17East Strand (Kingston WWTF): This pump station is actually part of the WWTF and accepts the flow from East Strand gravity sewers and other pump stations PS #4, #11 and #12) and delivers wastewater to plant. Total Capacity ±680 gpm (2 pumps), 6" force main.

GRAVITY SEWERS

The gravity sewers in the BOA serve as collectors which discharge into one of the four pump stations described above. The main gravity sewers in the BOA are on East Strand Street near the Kingston WWTF:

- West of WWTF; 15" diameter. Conveys wastewater from Ponckhockie neighborhood, PS #4 and #11, discharges to PS #17.
- East of WWTF from Hudson River Maritime Museum to PS #17.

BOA UN-SERVED AREAS:

There are no sanitary sewers serving Island Dock.

KINGSTON WASTEWATER TREATMENT FACILITY (WWTF)

Located adjacent to the BOA north boundary at 91 East Strand Street the Kingston WWTF is the one of the most significant and critical public facilities and land uses on the Rondout. The WWTF service area includes the City of Kingston, and portions of the Towns of Ulster and Esopus (Hamlet of Port Ewen).

Kingston WWTF Existing and Future Capacity

The capacity of the existing WWTF as well as future flows due to growth and development in the service area has been studied in the Kingston WWTF Long Term Capital Plan, (May 2015).

The current permitted capacity is 6.8 million gallons per day (MGD) 12-month rolling average. The regulated peak wet weather flow into the WWTF is targeted at approximately 10.5 MGD.

For the period from January 2011 to July 2014 the WWTF received and treated an average of 5.8 MGD (actually daily average flow of 5.2 MGD plus one standard deviation of 0.6 MGD). This includes the additional wet weather flow from the significant weather events of Hurricanes Irene in 2011 and Sandy in 2012. Therefore, based on average daily flow the plant normally operates at below its permitted capacity. The WWTF operation is not currently under consent order or moratorium and operation is generally in compliance with the NYSDEC State Pollutant Discharge Elimination System (SPDES) Permit. Therefore, based on allowable hydraulic capacity, the existing facility appears to have some surplus available current capacity.

Future flows included in the study included a modest growth allowance (less than 1000 persons) for the City of Kingston through 2035. Future flows also included obligations to the neighboring communities of the Towns of Esopus, Ulster and East Kingston for additional flows totaling approximately 0.4 MGD (average daily flow) as well as new flows from three planned developments in the City of Kingston totaling about 0.6 MGD ("Sailor's Cove", "Parking Garage" and "Hudson Landing"). Therefore, the available current surplus hydraulic capacity that exists at the WWTF may either already committed or under obligation. Some of the growth allowance could be assumed to be allocated to BOA development.

However, several other permit parameters were also analyzed with the various treatment processes at the facility to assess the capacities of individual unit processes as well as overall plant capacity. This analysis was done under current flows and future utilization scenarios. The findings of this study indicate that several processes have inadequate capacity under current flow conditions. Despite these process capacity issues the facility discharge water quality continues to meet required SPDES permit limits. The results of the analysis are summarized in Table 4-4 of the referenced study. The study further recommends that several improvements, replacements and/or upgrades will need to be implemented at the facility in the next 20 years to maintain plant capacity and expand capacity for future development.

COMBINED SEWER OVERFLOW'S (CSO'S)

According to the Combined Sewer Overflow Long Term Control Plan 4 the Kingston combined sewer system captures 89% of wet weather combined sewer flows for full treatment. Approximately 92% of the CSO volume for Kingston occurs in the



FIGURE 08.9 Hasbrouck CSO #5

BOA at the Hasbrouck CSO outfall #05. That outfall is located under the Hudson River Maritime Museum (green sign posted, Figure 08.9). The CSO #05 volume is approximately 29 MG/year with an average total duration of 423 hours/year over about 62 occurrences and a peak overflow rate of approximately 260 CFS. CSO #05 is active in both dry and wet weather.

There are two other minor CSO's in the BOA; CSO #06 at the foot of Broadway (near the flagpole and information booth), and CSO #07 Hunter located across from Island Dock near the foot of Ravine Street.

These CSO's can potentially negatively affect the water quality of Rondout Creek and specific measures have been implemented to manage it within required Water Quality (WQ) standards. There are currently no plans to eliminate these CSO's.

CSO POST CONSTRUCTION WATER QUALITY MONITORING

As part of their approved Long Term Control Plan the City of Kingston has conducted post construction water quality monitoring on Rondout Creek in the 2014 recreational season (May through September). According to the Rondout Creek Water Quality Study5 175 samples were collected on Rondout Creek during the study period and analyzed for fecal coliform, total suspended solids (TSS), dissolved oxygen (DO) and temperature. Based on the monitoring and testing results in the study period it was concluded that Rondout Creek was not impaired or precluded from meeting the applicable WQ Standards for Class C waters.

NATURAL RESOURCES AND ENVIRONMENTAL FEATURES

The BOAs existing natural resources and environmental features and current conditions are presented in the Step 2 Nomination Study Natural Resources and Environmental Features and Section 4, Figure 04.35. The Natural Resources and Environmental Features include: upland natural resources and open space; soil and topographic resources; surface waters, groundwater resources; wetlands; flood plains; erosion hazard areas; fish and wildlife habitats; scenic resources; and locally, state, or federally designated resources.

Natural resources and environmental features have generally remained the same since the Step 2 Nomination was submitted, with the exception of issues related to flooding, which is discussed in greater detail below.

FLOOD RISK

FEMA FLOOD INSURANCE STUDY (FIS)1

The current FIS for the City of Kingston has an effective date of September 25, 2009 and has undergone one update which was issued December 12, 2011. According to the FIS Table 8 on page 28 of the FIS, the effective regulatory 1% Base Floor Elevation (BFE) for the BOA is elevation 8.2 (NAVD 88). This regulatory BFE takes into account the backwater affect from the Hudson River. However, this BFE does not take into account the effects of a tidal surge, such as occurred with hurricane Sandy in 2012, nor does it take into account the effects of Sea Level Rise (SLR).





FIGURE 08.11 FEMA Flood Insurance Rate Map



FIGURE 08.12 Floodway Schematic

FLOODWAY BOUNDARY AND FLOODWAY FRINGE1

Also shown on the FIRM is the Floodway boundary. The Floodway is defined as the waterway channel that must be kept free of encroachment so that the 1% Base Flood can be carried without substantial increases in flood heights. The Floodway Fringe is the area between the Floodway and the floodplain boundary (SFHA). The Floodway Fringe is the portion of the floodway that could be completely obstructed without increasing the water surface elevation of the 1% Base Flood more than 1.0 foot at any point. The Floodway Fringe is an area that development encroachment is allowable under FEMA minimum standards. The relationship between the Floodway and Floodway Fringe is shown below in Figure 1 (excerpted from the Ulster County FIS).

As shown on the FIRM, the Floodway Boundary in the BOA roughly corresponds to the northerly bulkhead line of the Rondout Creek waterfront. Therefore, the majority of the BOA lies in the Floodway Fringe, or the area of allowable encroachment. According to the FIS and FEMA standards development could occur in the Floodway Fringe without increasing the 1% Base Flood elevation more than 1.0 foot. However, development in the Floodway Fringe will still be subject to flooding.

KINGSTON TIDAL WATERFRONT FLOODING TASK FORCE

Fundamental to the evaluation of flood risk for the BOA is whether or not one is to account for the effects of tidal storm surges and projected Sea Level Rise (SLR). The FEMA FIS does not take into account either of these two phenomena.

The City of Kinston has issued the document Planning for Rising Waters: Final Report of the City of Kingston Tidal Waterfront Flooding Task Force in September, 2013. The purpose of the study was to assess the risks and develop strategies to address the effects of tidal surges and sea level rise along the Rondout-Hudson waterfront.

Flooding Risks Today and in the Future

The study references various sources with SLR projections resulting in recommended range of a SLR of 20" to 36" by the year 2060 and 33" to 68" by the year 2100. The selected SLR ranges were then be added to the FEMA BFE (as described earlier in this report) as a basis for mapping the projected future extent of the "mean higher high water" (MHHW) and BFE floodplain and evaluating the future flood risks.

Section C of the study also included an evaluation of four alternative scenarios for cost/benefit for the East Strand/Ponckhockie neighborhood. Scenario A is "do nothing." Scenario B involves raising East Strand Street to elevation 11. Scenario C involves constructing and elevated bulkhead with levee and path to elevation 11. However, neither scenario B or C will provide protection from SLR because elevation 11 is not high enough given the even the most modest SLR projection criteria.

Recommendations

The study developed a list of 24 general recommendations for the City as well as several site specific recommendations for 11 shoreline neighborhoods. The general recommendations are grouped by five major categories and sub-grouped by "Near-term" and "Long-term" actions. The site specific recommendations include specific recommendations for seven of the "neighborhoods" which are included inside the BOA boundary.

The reader is directed to Appendix A for the Final Report for full details of the findings and recommendations.

EAST STRAND STREET FLOODING AND STORMWATER MANAGEMENT ANALYSIS

East Strand Flooding

Based on detailed analysis the East Strand Analysis concludes that the existing stormwater drainage systems in the East Strand Street area are inadequate to prevent localized "nuisance flooding" from storm runoff from upstream tributary areas (10 year rainfall event or less). This is due to both inadequate capacity and low elevations on East Strand Street. When a rainfall event occurs simultaneously with a high tide event the capacity of the storm drainage system is irrelevant.

Unrelated to storm drainage capacity issues, the study also notes that East Strand is subject to more extreme flooding from tidal events. A 10 year frequency tidal event causes flooding on East Strand to elevation ± 6.4 . Sea Level Rise will cause tidal flooding to increase in magnitude and frequency.

Flood Mitigation Criteria

This study recommends elevation criteria for newly constructed building in flood prone areas along East Strand should meet or exceed the NYS Task Force findings for predicted SLR. These are shown in Figure 08.13 excerpted from the study.

New York State Sea Level Rise Task Force Findings					
SLR Scenario	2020s Predicted Increase in Sea Level (inches/feet)	2050s Predicted Increase in Sea Level (inches/feet)	2080s Predicted Increase in Sea Level (inches/feet)		
Low Prediction	3.5 / 0,3	9.5 / 0.8	24 / 2.0		
High Prediction	7.5 / 0.6	24/2.0	48/4.0		

The recommendations include reducing the vulnerability of coastal areas, emphasizing coastal planning, directing new development away from high risk areas, increasing public awareness, and for all relevant agencies to incorporate SLR into their planning.

FIGURE 08.13 NYS SLR Task Force Findings

Zoning Local Law 405-26.G.3 and G.4 requires new residential and non-residential structures to be elevated to at least 2 feet above the effective BFE elevation of 8.2 (resulting structure elevation 11.2). Taking into account NYS Task Force findings on predicted SLR the recommended building elevation would be from 12.0 to 15.2 depending on what elevation criteria is considered appropriate for the facility.

ECONOMIC CONDITIONS AND MARKET TRENDS

The existing economic conditions and market analysis within the BOA and City in general were presented in Section III.D of the Step 2 Nomination Study and updated in Section 4 of this BOA Plan.

ASSESSMENT AND MITIGATION OF POTENTIAL SIGNIFICANT ADVERSE IMPACTS

This section assesses potential significant impacts that may result from implementation of the BOA Plan and identifies potential mitigation measures for those impacts considered significant and adverse, based on the information known at this time.

IMPACTS ON LAND USE, COMMUNITY CHARACTER AND OWNERSHIP PATTERNS

Future land use was described in detail in the Step 2 Nomination Study Section E.5 (Proposed Waterfront Land Uses) and depicted on the Kingston Waterfront Development Implementation Plan map. The BOA Plan includes a full range of improvements proposed to support a mixed-use BOA and waterfront including new commercial development, trail and recreational projects, shoreline infrastructure needs, transportation improvements, and support for local museums among other actions. This Step 3 Study refines future lands uses in Figure 08.15 and conceptually identifies future redevelopment projects in the Hudson Riverport Vison Plan in Section 6.

Implementation of the BOA Plan will result in changes to the existing land use patterns as well as character of the immediate surrounding area. The Strategic Sites have been targeted for redevelopment as catalyst projects to spur secondary redevelopment around them. Given that the strategic sites (with the exception of Block Park) are primarily vacant or underutilized brownfields, the proposed changes in land use to active commercial, entertainment, recreation and/or residential uses are anticipated to be positive land use impacts on the properties and surroundings. Preferred land uses for the BOA in general and Strategic Sites specifically are described in detail previously in this section (Project Description). Figure 08.14 quantifies the area (in acres) of each land use category under full implementation of the BOA Plan. The Preferred Land Use Option Map is presented in Figure 08.15.

Implementation of the BOA Plan would result in some changes in how the land is occupied or developed. The greatest change in land use as categorized in Figure 08.14 may occur in Parks/Open Space land uses with a net increase of over 24 acres. The redevelopment of the Strategic Sites will result in the permanent conversion of over 40 acres of currently vacant or underutilized areas to higher uses including, commercial, residential, and mixed-use and parks/open space.

Implementation of the BOA Plan represents a positive change in use that is consistent with the proposed Comprehensive Plan. In particular, the BOA Plan is consistent with, or supports the achievement of the following Goals presented in the proposed Comprehensive Plan (see section 7.c.ii):

- Goal 1: Objective 1.1: Regulate a land use pattern that concentrates residential density and commercial activity in mixed-use cores, rather than separating uses and densities and orienting commercial activity along vehicular corridors.
- Goal 1: Objective 1.4: Promote a citywide aesthetic and culture that is vibrant, attracts visitors to the City, and makes Kingston a more effective center for government, commerce and culture in Ulster County.
- Goal 2: Objective 2.5: Promote social interaction through the provision of neighborhood gardens, community gardens, parks and other open spaces.
- Goal 3: Objective 3.2: Identify and protect scenic views as seen from roadsides, parks,

	EXISTING (acres)	PREFERRED (acres)	CHANGE (+/- acres)
Residential	2.5	6.7	+4.2
Vacant	40.9	0	-40.9
Mixed-Use Commercial/Residential	0	9.2	+9.2
Commercial (including Hotel and Parking)	0.6	19.7	+19.1
Recreation / Entertainment	4.1	1.1	-3
Public Services	6.3	4.3	-2
Community	2	5.3	+3.3
Industrial	22.5	5.9	-16.6
Parks / Open Space	105	129.8	+24.8
ROW and other uses	6.1	8	+2.1
 totals	190	190	-

FIGURE 08.14 Preferred land uses table



FIGURE 08.15 Preferred land uses map

waterfronts, and other areas frequented by the public.

- Goal 4: Objective 4.1: Strategy 4.1.4: Take advantage of the proximity to the Hudson, Rondout, and Esopus waterways, Shawangunk and Catskill Mountains and other natural resources.
- Goal 4: Objective 4.3: Strategy 4.3.1: Follow through on the development of a Generic Environmental Impact Statement (GEIS) and Implementation Plan for the Rondout Waterfront.
- Goal 7: Objective 7.3: Increase the access and maintenance of neighborhood parks and recreation facilities.
- Goal 10: Encourage vibrant mixed-use land use patterns in Rondout centered around waterfront access, restaurants and tourist attractions, and active recreation.

The majority of redevelopment projects will occur on private property and the overall land ownership patterns will remain the same. However, the BOA Plan does recommend one significant change in ownership between public and private lands. The BOA Plan proposes that Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) might be purchased by the City of Kingston, possibly with the participation and/or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition. The city-owned parkland could become private and available for development and the privately-owned vacant former industrial property could become a public park. There will be a net increase of approximately 13 acres in public-owned land. As this scenario is further investigated and advanced, one impact to be evaluated in detail will be costs of acquisition and re-locating/re-building the existing park facilities and of the environmental remediation on Island Dock will be allocated.

IMPACTS ON NATURAL RESOURCES

This section addresses the potential effect of the BOA Plan on groundwater and surface waters, wetlands, flood plains, erosion hazard areas, fish and wildlife habitats, and other local, state, or federally designated resources.

As presented in Section 6, the BOA Plan's Habitat Strategies guide restoration and protection of the existing natural habitat, as well as guides the integration of new habitat corridors throughout the BOA. The strategies include:

- Providing new habitat opportunities at the edges through selective softening of the shoreline,
- Creating reef streets that provide small niches and vegetation for fish to hide and spawn by restoring existing wetlands, and
- Creating wetland buffers.

The redevelopment of the Strategic Sites would offer an overall enhancement to natural resources at each of the Strategic Sites, where most have been utilized as industrial sites and some are currently vacant or abandoned. Enhancements resulting from redevelopment to the preferred uses include;

- Expanded greenspace,
- · Restoration and protection of existing natural habitat,
- · Creation of wetland migration buffers, and
- Creating educational trails.

The Kingston Point redevelopment plan includes restoration to existing wetlands and construction of a boardwalk to allow for public access to view the wetlands. The majority of the BOA does not impact any designated wetland areas. Any future project within a designated State or Federal wetland or within a 100' buffer of a State wetland would require that future design avoid the wetland to the maximum extent possible or minimize the footprint. Wetland mitigation would most likely be required for any redevelopment in a designated wetland or wetland buffer area and consultation with New York State Department of Environmental Conservation (NYDEC) and United States Army Corps of Engineers (USACE) would be required.

The development and planning of the BOA strategic sites utilized the City's Waterfront Design Standards to promote new development which enhances the natural resources. Therefore, it is not anticipated that redevelopment of the Strategic Sites will result in significant adverse impacts to the existing natural resources.

Natural resources and environmental features have remained the same since the Step 2 Nomination was prepared, with the exception of changes in flooding information which is presented next.

IMPACTS FROM FLOODING

The majority of the BOA is located in the regulatory Special Flood Hazard Area. Redevelopment or new development in the BOA will be subject to flooding. The primary cause of flooding is high water surface elevations in Rondout Creek and the Hudson River which are greatly influenced by high tides, storm surges and sea level rise. Some portions of the BOA are also subject to flooding from storm runoff from upstream tributary areas.

The Hudson River is a first order stream. Due to the relatively large watershed area and conveyance capacity of the Hudson River, development in the BOA will not have a significant effect on the water surface level or flooding in the River. Numerous Local, State and Federal laws and regulations are in effect to ensure that waterfront development is managed according to required standards.

BOA FLOOD RISK MITIGATION GENERAL RECOMMENDATIONS

- Development in the floodway fringe is an allowable permitted use according to FEMA minimum standards. However, development in the floodway fringe will still be at risk and subject to periodic flooding. New development must be designed to incorporate appropriate flood proofing measures.
- Development in the BOA is subject to the requirements of Local Law Section 405-26. Specifically, all new residential and non-residential structures shall be designed in accordance section 405-26.G.
- Individual development proposals should consider the strategies and recommendations of the City of Kingston Tidal Waterfront Flooding Task Force from their final report dated 9/18/2013.
- · Individual development proposals should consider the recommendations and criteria in

the East Strand Street Flooding and Stormwater Management Analysis final report dated 2/19/2014.

- The planning criteria for future Sea Level Rise for new development should be consistent with the anticipated life of the facility.
- New development or redevelopment projects which involve soil disturbance of 1 or more acres will be subject to the requirements the New York State DEC SPDES General Permit for Stormwater Discharges from Construction Activities. These projects will be required to implement temporary erosion and sedimentation control measures as well as permanent stormwater management practices for runoff reduction, water quality treatment and regulation of discharge rate and volume. The SPDES General Permit may not apply to all BOA redevelopment projects, if not then projects may require an individual SPDES.

POTENTIAL FLOOD MITIGATION STRATEGIES

Potential flood mitigation strategies were the focus of Section 6.3 in the East Strand Street Flooding and Stormwater Management Analysis. These mitigation strategies can be extended to the entire BOA waterfront. In this study the strategies were grouped into three main categories:

- · Fortification: various shoreline treatments; bulkheads, levees, flood walls, land filling.
- Relocation: of high risk facilities to higher ground (e.g. Kingston Waste Water Treatment Plant).
- Accommodation: Implementing measures to accommodate floodwaters to minimize damage (e.g. elevating structures, passage of floodwaters). These measures are already a requirement of Local Law 405-26, but do not take into account storm surges and sea level rise.

For the purposes of land use planning for the BOA an additional strategy could be:

• Zoning Modification: Modification of the existing Local Law 405-26 Flood Hazard Overlay District to further regulate permitted uses consistent with section 405-26.B to functionally dependent uses.

FLOOD MITIGATION MEASURES

Fringe Land Filling

Areas in the floodway fringe are by definition "the portion of the floodway that could be completely obstructed without increasing the water surface elevation of the 1% Base Flood more than 1.0 foot at any point." The floodway fringe is an area where development encroachment is allowable under FEMA minimum standards. The filling could be done on an individual parcel basis and would not necessarily need to be done to a specific elevation. According to the FIS the 1% BFE is 8.2 and the 10% flood elevation is approximately 6.0. However, these properties would still remain in the regulatory Special Flood Hazard Area (SFHA) until the flood mapping is revised. Structures would also still need to be constructed to the minimum standards of Local Law 405-26. Permits may be required for activities associated with land filling operations.

Flood Barriers and Levees

Various forms of bulkheads, flood barriers and levees could be constructed to provide hard protection from flooding. These types of measures may require large expenditures of public funds and result in encouraging development in flood prone

areas. They need to be designed and constructed to robust and stringent FEMA standards and actively maintained. When these measures fail the damage can be widespread and catastrophic. The reader is referred to section 6.3.5 of reference #5 (Appendix A: Section 8 Infrastructure References) for a detailed description of the considerations, criteria, advantages and limitations of flood barrier implementation. Due to the practical limitations, high cost and relatively small area that would benefit, these types of measures may not be appropriate for all areas in the BOA or considered sustainable and consistent with the goals of the BOA plan.

IMPACTS ON CULTURAL RESOURCES (HISTORIC AND/OR ARCHEOLOGICAL)

HISTORIC RESOURCES

Implementation and build-out of the BOA Plan may result in impacts on known historic resources in and in close proximity to the BOA. Direct effects to historic resources may include renovations and improvements to historic structures located at the Strategic Sites identified for redevelopment. The following cultural resources are located within the identified Strategic Sites for redevelopment:

- Island Dock: as presented in the Step 2 Nomination, is considered a City landmark of importance to the history of Kingston and the development of industry on the Hudson River. Also, the Kingston-Port Ewen Suspension Bridge is considered a Historic Landmark and crosses the eastern end of Island Dock.
- The Noah Hotel site is located within a National Register Historic District (Rondout/West Strand Historic District).

Measures will be taken to avoid, to the extent possible, or minimize impacts to historic resources. The preferred redevelopment activities on Island Dock should not involve any disturbance to the Kingston-Port Ewen Suspension Bridge. However, being that the Noah Hotel site is located within a National Register Historic District, additional consultation with OPRHP would be required prior to redevelopment activities once project-specific design is proposed.

ARCHAEOLOGICAL RESOURCES

Implementation of the BOA Plan may impact archaeological resources. In their April 15, 2015 response letter, the OPRHP stated:

Based on our review of the submitted materials, there is a potential for redevelopment in the Study Area to impact archaeological and/or historic architectural resources. Lacking specific plans for redevelopment, we are unable to provide specific comments and recommendations. We would be happy to provide such comments, when we are provided with detailed redevelopment plans.

Therefore, additional consultation with the OPRHP will be required for future sitespecific redevelopment projects that include ground disturbance or are located in Rondout Creek and/or the Hudson River. Consultation with OPRHP should be undertaken early in the design and application process and will need to be documented as part of any future project-specific SEQRA assessment(s).
VISUAL AND AESTHETIC IMPACTS

Implementation of the BOA Plan may result in significant changes in the visible landscape that are different from the current conditions and surrounding land uses. This section identifies and assesses the BOA Plan's potential to change the character or quality of aesthetic resources in and surrounding the BOA, including water views from existing residential neighborhoods west of the BOA.

As stated in the Step 2 Nomination, there are no State identified "Scenic Areas of Statewide Significance" in or around Kingston. However, there are a number of scenic vistas within the BOA that are significant. The following are considered significant scenic vistas within the BOA:

- Hasbrouck Park;
- Views from Kingston Point, the Kingston Point Lighthouse, the tip of Island Dock and the Port Ewen Suspension Bridge;
- · Kingston's Hudson River waterfront, and
- The Kingston identified "scenic zone."

As presented in the Step 2 Nomination, a "scenic zone" in Kingston was identified. This zone encompasses the middle ground of views seen from the district. The development character of the scenic zone is critical to the continued scenic quality of the district and of visual significance from higher elevations in Dutchess County. However, redevelopment in the scenic zone is at a significant distance from Dutchess County viewing sites and will have little visual impact on the character of western views except for instances of large-scale development.

The juncture of Rondout Creek and the Hudson River also lies within the Scenic Zone of the Mid-Hudson Historic Shorelands Scenic District. The Scenic Zone defines an area within which new development could adversely affect the quality of the western viewshed of the Scenic District. The Zone boundary lies 2,000 feet west of the high tide line on the west bank of the Hudson River. In the Management Plan for the Scenic District, the Strand and Kingston Point are described as visual features of the riverscape that contribute significantly to the district's scenic quality from wherever they are seen.

As presented in Section 6, part of the BOA Landscape Strategy is to create continuous public access with expansive views from the Rondout to the Hudson. The design presents major view corridors along streets to be kept open. Also, building heights and plantings will be kept lower at the water's edge to maintain views. At the sites where there will be buildings greater than 2 - 3 stories high, greater distances will be kept between the buildings to maintain connections and provide more scenic opportunity.



FIGURE 08.16 Redvelopment Building Heights

STRATEGIC SITES

Figure 08.16 presents redevelopment building heights and vision lines from surrounding areas to the strategic sites. Mitigation measures to avoid, to the extent possible, or minimize visual impacts were addressed in the development of design strategies during the early planning process. These strategies considered placement and height of buildings, spacing between buildings, surrounding residences, waterfront view, and "green buffers." The redevelopment of the Strategic Sites would offer an overall aesthetic improvement at each of the Strategic Sites, where most have been utilized as industrial sites and some are currently vacant or abandoned. Enhancements resulting from redevelopment to the preferred uses include; expanded greenspace and an enhanced waterfront.

KOSCO ASSEMBLAGE

The preferred redevelopment option includes two buildings that would range from 3 - 4 stories high. Figure 08.17 depicts the line of vision from the surrounding neighborhood to the KOSCO site. As shown in the Figure, the line of vision from surrounding residences to the redevelopment buildings would have little to no visual impact to the surrounding views and waterfront. The redevelopment activities would maintain view corridors along streets and provides new means to engage the waterfront.



FIGURE 08.18 KOSCO Assemblage site section key plan



FIGURE 08.17 KOSCO Assemblage Site Section

THE LANDING

The preferred redevelopment option will be a focused single building of 2 - 3 stories that creates a mixed-use trolley terminal with retail and cultural space. The Landing is located at the mouth of Rondout Creek and is bordered by the Millens property (former industrial site). The line of vision of the surrounding residences to the redeveloped site will have little to no visual impact due to the projected design (height and placement) of the redeveloped buildings.

MILLENS

The preferred redevelopment option of the site is combined with adjoining properties to create a destination 40 key eco-hotel with smaller guest room consisting of low-impact bungalows. The guest rooms would be situated along a boardwalk and offer a scenic view of the wetlands. The adjoining properties currently consist of condemned houses that have sustained damage from flooding and are beyond repair. The line of vision from the surrounding neighborhood to the site would have low to no visual impact. The hotel building would be 1 - 2 stories, which would result in low visual impact by maintaining views of the waterfront.

BLOCK PARK

The preferred redevelopment option includes buildings ranging from 4 - 6 stories high. As depicted in Figure 08.19, there would be no visual impact to the waterfront. There are minimal existing residential structures in the immediate surrounding Block Park area. The landscape to the north of Block Park slopes upward which provides the existing residences an unobstructed view over new development at Block Park to the waterfront. Due to the elevation difference, the view from the existing residential area to the waterfront will remain the same, and the view to the Island Dock area will be visually enhanced upon completion of the redevelopment activities at that site.

Island Dock

The preferred redevelopment includes a softball diamond on the south west corner of the parcel, bioswales, a network of pedestrian walkways, Greenline, trolley, and boardwalk to the entrance to Island Dock. The existing trees would be largely preserved with minimal walking trails and sculptural art would be displayed throughout. At the eastern tip of the island, a small amphitheater could be located and constructed as to not impact the line of vision from the surrounding areas to Island Dock. There would be no visual impact to the surrounding residences by incorporating the Island Dock redevelopment plan and the redevelopment would offer a visually enhancement of the Island Dock area.

NOAH HOTEL

The preferred redevelopment option includes two buildings are proposed at the site; the hotel and a 2 - 4 story commercial building. The original plan for this parcel was to be developed as a hotel. A series of public terrace landscape spaces would connect the upper level and lower level to provide green space, and would also be



FIGURE 08.20 Block Park / Island Dock site section key plan



FIGURE 08.19 Block Park / Island Dock Site Section

an opportunity to create a connection point to Island Dock and incorporate it into the development. A municipal garage would also be constructed and designed to have parking buried into the hillside, providing minimal visual impact. Due to the design of the building, there would be little to no visual impact from surrounding residences to the waterfront view.

It should be noted that this SEQRA assessment considers full build-out of the entire BOA Plan. As described in the phasing plan presented in Section 6 (Design Strategy) it is anticipated that build-out will take 20+ years. As the waterfront redevelops slowly, the changes in the visual landscape and community character will also change slowly. The incremental progression in visual landscape will temper the significance of the change.

The development and planning of the BOA strategic sites utilized the City's Waterfront Design Standards to promote new development which enhances the visual appearance of the City. By meeting those standards as well as the height limitations provided in the BOA Plan Design Strategy, it is not anticipated that significant adverse visual impacts to the existing scenic waterfront will result from the redevelop of the Strategy Sites. However, once project-specific designs are proposed, it is anticipated that a more detailed assessment of the visual impacts from any redevelopment project over 1 - 2 story should be done as part of the site plan and SEQRA reviews. This assessment may include view shed analysis to determine where the new development will be visible from and line-of-sight diagrams to facilitate an assessment of their level of impact.

OPEN SPACE AND RECREATION

It is anticipated that implementation/full build-out of the BOA Plan will impact publicly-owned parkland or open space, including Block Park, and Kingston Point Park/Kingston Beach.

The BOA Plan proposes improved public access via boardwalks and paths, improved facilities and amenities, and wetlands/habitat restoration at Kingston Point Park. In general, the recommended improvements a Kingston Point will be designed to be as low impact as possible and be sustainable. Design and construction of projects to implement the recommended improvements will require environmental permitting if those activities disturb wetlands and/or are located within the floodplain. Through the design, review and permitting process, impacts to wetlands will be avoided and minimized to the greatest extent possible. Where disturbance to wetlands are unavoidable, mitigation may be required to offset the impact. It is anticipated that the recommended changes at Kingston Point will to be positive in nature and not result in significantly adverse impacts.

The BOA Plan proposes that Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) might be purchased by the City of Kingston, possibly with the participation and/or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition. This real estate transaction would allow the relatively more upland Block Park (having direct access to the public street system) to be developed for residential and commercial uses. In turn, the former Block Plant and Island Dock could become public properties and developed for park purposes. Recreation facilities now located in Block Park could be relocated onto Island Dock. The athletic fields and baseball diamond could be replaced on a portion of the former block plant.

It is anticipated that mitigation will be required in order for the proposed transaction to remain impact neutral and include the following:

- Extension of German Street and improvements to Abeel Street.
- Bioswales and other flood mitigation infrastructure are incorporated into the landscape between buildings.
- Existing recreation facilities at Block Park could be relocated at the former block plant, on Island Dock, or in other park facilities in the Rondout neighborhood.
- Pedestrian and vehicular access improvements to Island Dock include:
 - Extension of the Greenline, trolley line (in the long-term);
 - Extension of boardwalk from Ravine Street west along the water to the entrance to Island Dock;
 - Pedestrian bridge to connect the island to Hone Street.
- Use of pavement for parking lot at the former Block Plant.

The preferred option for future development at Block Park by a private entity could include residential development with ground floor retail which represents a change to a more intensive land use and permanent conversion of the land from low intensity (recreation) to approximately 538,000 sf of mixed-use space including 321

residential units. Future proposal(s) for site-specific project(s) will require site plan review and SEQRA assessment once detailed design and engineering is available.

The BOA Plan does not propose any direct changes to TR Gallo Waterfront / West Strand Park and Rondout Landing Dock.

TRANSPORTATION IMPACTS AND MITIGATION

There are a number of improvements to the transportation system that are in the planning phase. The City has a plan to expand the existing, limited, trolley service to the entire waterfront. Another planned improvement is the Kingston Greenline. The Greenline is a plan to create a network of urban trails, complete streets, bike lanes and linear parks in the city of Kingston. With these plans, the multimodal access to the BOA will be improved.

The existing road network has a limited amount of accessible pedestrian accommodations. As the improvements are made special attention should be taken to incorporate accessible features. Another transportation improvement to consider are complete streets which will provides a place for all users.

The Kingston Waterfront BOA developments will generally be implemented by private landowners. There is a list of the key or catalyst projects in Sections 6 and 8 of this BOA Plan. These developments are described in previous sections of this document at a conceptual level.

When identifying the amount of traffic (trips) a particular site might add to the existing road network trips the standard practice is to use the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE). This document contains trip generation rates for numerous land uses and building types. The rates are based on weighted averages from studies conducted throughout the United States and Canada. The 9th edition was used for this report. For each type of development described previously there are a number of different sub-types. Many of the sub-types trip generation rates have an extensive range of values. As an example, there are a number residential options discussed at the strategic sites. These types of units have a wide range vehicle trips ends as shown in the Trip Generation Manual. For instance, the average rate for trip generation per dwelling unit in on a weekday is 3.44 trips/dwelling unit for the Senior Adult Housing - Attached, ITE Land Use Code 252. The average rate for trip generation per dwelling unit in on a weekday is 6.65 trips/dwelling unit for the Apartment, ITE Land Use Code 220.

As these projects are developed beyond the conceptual level a more complete assessment of the transportation systems will need to be completed. A typical threshold used to determine the need for a Transportation Impact Analysis is if the proposed development adds 100 vehicles in the adjacent roadways' peak hour traffic generation or the development's peak hour traffic generation.

INFRASTRUCTURE AND UTILITIES IMPACTS AND MITIGATION

PUBLIC WATER SUPPLY (PWS)

BOA Projected Future Domestic Water Demand:

Based on the BOA Plan recommended land uses and potential projects the projected domestic water demand at full implementation is summarized by land use in the following Figure 08.21.

FIRE SUPPRESSION WATER SUPPLY

A detailed assessment of the ability of the existing KWD water distribution system to deliver adequate fire suppression water is beyond the scope of this review. The existing KWD water distribution system is assumed to meet current standards for fire suppression water supply. Development projects as described in the BOA plan will be designed to meet all applicable code requirements for fire protection. It is acknowledged and recommended that public and/or private water system improvements for fire suppression will be required for implementation of the BOA plan.

Based on the projected domestic water demand the BOA plan will not have a significant adverse impact on the Kingston public water system. This assessment is based on the following findings:

• The Kingston Edward T. Cloonan Water Treatment Plant has a nominal production capacity of approximately 8 million gallons per day (MGD). The existing average daily demand into the KWD system is \pm 3.5-4 MGD and the existing peak daily demand is typically 4.7 MGD. Therefore, the Kingston water system currently has surplus production capacity.

Proposed Land Use (1)	Gross SF(1)	Res. Units (4)	Hotel Rooms(3)	Unit Daily Demand Rate (GPD/unit) (2)	Projected Daily Demand (GPD)
Civic	111,000	-	-	0.10	11,100
Commercial	361,000	-	-	0.10	36,100
Retail	278,000	-	-	0.10	27,800
Residential (assume 1200 SF/unit)	511,000	426		300	127,800
Hotel	152,000	-	190	120	22,800
TOTALS	1,413,000	426	190	-	225,600
Total Average Daily Demand - Gallons Per Day (GPD)	225,600				
Maximum Daily Demand (2 times average) (GPD)	451,200				
Peak Hourly Demand Rate: Gallons Per Minute (GPM)					
Based on Peak Factor 4.0, 1440 minutes per day	627 GPM				

FIGURE 08.21 BOA projected domestic water demand

Figure 08.21 Footnotes:

- 1 Land uses based on Design Strategy 8/13/15, "Kingston Parcel_working 08 12 15.xlsx".
- **2** Use 0.10 GPD/SF for Civic, Commercial and Retail.
- 3 Use 120 GPD/hotel room.
- 4 Use 300 GPD/residential unit, (assume 1,200 df/unit, 2.75 persons/unit, 110 GPCD).

- The projected domestic average daily water demand for the BOA plan at full implementation is ±0.23 MGD with a projected peak hourly demand of ±627 GPM. Based on available information the existing KWD distribution system is capable of delivering domestic water to the BOA at adequate pressure, volume and rate.
- Some specific components of the existing water distribution system may have limitations due to pipe diameters and obsolescence (service life). Required upgrades and replacements to the KWD water distribution system can occur parallel with public street improvements and individual development projects.
- All new utility facilities shall be designed and built to required flood proofing standards and codes.

PUBLIC SANITARY SEWER SYSTEM

BOA Projected Future Wastewater Flow:

For the purposes of this review the future projected wastewater flow for the BOA Plan recommended land uses and potential projects at full implementation are considered to be equal to the projected domestic water demand as described above. These projections are summarized accordingly:

BOA Projected Average Daily Flow:	225,600 GPD	(0.226 MGD)
BOA Projected Maximum Daily Flow:	451,200 GPD	(0.451 MGD)
BOA Projected Peak Hourly Flow:	627 GPM	(peak factor 4.0 and 1,440 min./day)

The character of the wastewater is normal sanitary wastewater. There are no anticipated flows from new industrial or manufacturing facilities.

Based on the projected wastewater flow the BOA plan will not have a significant impact on the Kingston public sanitary sewer system. This assessment is based on the following findings:

BOA SANITARY SEWER FACILITIES

- The BOA existing wastewater collection and conveyance system is primarily based on four pump stations. Individual development proposals must include an analysis of the capacity of the receiving pumping facilities and potential upgrades or modifications.
- Existing 15" gravity sewers on East Strand Street have excess nominal capacity to accommodate projected flows. Specific components of the existing sanitary sewer system may be at obsolete (service life). Required upgrades and replacements can occur parallel with public street improvements and individual development projects.
- All new utility facilities shall be designed and built to required flood proofing standards and codes.

KINGSTON WWTF

- The Kingston WWTF captures 89% of wet weather combined sewer flows for full treatment.
- WWTF Current Permitted Capacity: 6.8 MGD (million gallons per day) 12-month rolling average.
- The regulated peak wet weather flow into the WWTF is targeted at approximately 10.5 MGD.

- For the period from January 2011 to July 2014 the WWTF received and treated an average of 5.8 MGD (actually daily average flow of 5.2 MGD plus one standard deviation of 0.6 MGD). This includes the additional wet weather flow from the significant weather events of hurricanes Irene in 2011 and Sandy in 2012.
- Based on the current average daily flow the plant normally operates at below its permitted capacity.
- The ability of existing Kingston WWTF to accept additional flows from proposed developments must be evaluated for each individual project at the time of application.
- The City is committed to ongoing WWTP improvements, replacements and upgrades to be implemented at the facility in the next 20 years to maintain plant capacity and expand capacity for future development.
- The WWTF operation is not currently under consent order or moratorium and operation is generally in compliance with the SPDES Permit.

COMBINED SEWER OVERFLOWS:

- Based on CSO water quality monitoring conducted in 2014 it was concluded that Rondout Creek was not impaired or precluded from meeting the applicable Water Quality Standards for Class C waters.
- Incorporate specific planned measures by the City for managing Combined Sewer Overflows within required water quality standards

ENVIRONMENTAL REMEDIATION OPPORTUNITIES

With the exception of Block Park, each of the Strategic Sites includes some level of known environmental condition. Potential impacts resulting from the proximity to, or disturbance of, known existing contaminated sites located within the BOA are presented below for each of the Strategic Sites. Available environmental investigations and determinations were reviewed and considered as they relate to the Strategic Sites. The proposed future land use(s) will dictate the level of remediation and therefore clean-up cost. The next step in the redevelopment process for the Strategic Sites would be to obtain funding to perform the next level of environmental study or remediation planning to determine the nature and extent of clean up necessary to allow the preferred redevelopment scenarios.

KOSCO ASSEMBLAGE

As presented above in the Strategic Sites-Known Environmental Conditions and in Section 4 (Background - Environmental Setting), contamination identified at the KOSCO site includes:

- Surface and subsurface petroleum products;
- · Petroleum products detected in groundwater, and
- Metals found in groundwater.

The proposed redevelopment plan includes parking, a waterfront promenade, and low-rise buildings. Construction activities associated with the low-rise buildings, including excavation work for the building foundation/basement, would disturb surface and subsurface soils and groundwater. Any potential soil disturbance associated with the redevelopment activities of the parking lot and promenade would also require further investigation. As presented in the Step 2 Nomination, a Phase II Site Assessment will be necessary to proceed with redevelopment.

THE LANDING

As presented above in the Strategic Sites-Known Environmental Conditions, Section 4, and the Step 2 Nomination, contamination identified at The Landing site includes:

- VOCs in soil and groundwater;
- SVOCs in soil and groundwater;
- · Metals in soil and groundwater;
- VOCs in air;
- PAHs in surface soil, and
- Unknown fill material.

Preferred redevelopment for the site includes a single two to three story building consisting of a mixed-use trolley terminal with retail and cultural space. The construction activities associated with redevelopment of the building, including excavation activities for the building foundation/basement would disturb surface and subsurface soils and groundwater. Per the Step 2 Nomination, there is the potential that onsite VOC contamination could contribute to VOC vapor intrusion issues associated with any future site buildings.

As presented in the Step 2 Nomination, a Phase II Site Assessment will be necessary to better identify areas of contamination to proceed with redevelopment. Once the areas and degree of contamination are better identified, clean-up procedures would need to be developed and the site remediated to the required standards necessary to accommodate the preferred future site development.

MILLENS & SON SCRAP METAL RECYCLING

As presented above in the Strategic Sites-Known Environmental Conditions, Section 4, and the Step 2, contamination identified at the Millens site includes:

- PCBs in surface and subsurface soils;
- PAHs in surface samples;
- Metals in subsurface soils;
- VOCs in subsurface soils;
- SVOCs in surface and subsurface soils;
- VOCs in groundwater;
- Metals in groundwater, and
- MTBE in groundwater.

Potential redevelopment for the site is to combine with adjoining properties to create a destination 40 key eco-hotel site. The construction activities associated with the redevelopment option would impact surface soil, subsoil and groundwater. The site is currently under NYSDEC consent and clean-up actions are being determined. Also, removal of the condemned housing would be necessary and any contamination associated with the housing would need to be identified. A plan for removal would need to be developed based on any identified contamination hazards and measures would need to be taken to avoid to the extent possible or minimize any impact during removal.

As per the May 2015 Citizen Participation Plan, once the Interim Remedial Measure is complete, NYSDEC will determine if any additional remedial actions are needed. If it is decided that additional cleanup action is needed, the project will proceed to designing and performing cleanup to address identified contamination issues. Upon completion of the cleanup action, NYSDEC will then approve or prepare a final engineering report detailing any needed additional cleanup requirements or stating that cleanup requirements have been met. Once the final engineering report is approved, the NYSDEC would issue a Certificate of Completion which would acknowledge the cleanup actions have met required cleanup levels with specific categories of use for the site. The final phase of cleanup would be Site Management. A Site Management Plan would be prepared to include significant activities. During this phase, NYSDEC may reclassify or remove the site from the Registry. The proposed redevelopment option for the site would need to be revisited upon completion of the Site Management Plan.

BLOCK PARK/ISLAND DOCK

Block Park

Section 4 (Known Environmental Conditions) and the Step 2 Nomination note that there are some drums and other materials located on Block Park that should be removed. However, the City does not have any records of drums or any materials stored at the site.

The preferred option for Block Park is a land swap involving the privately held land at Hideaway Marina and Island Dock/former Block Plant. This would result in redevelopment of the mainland (Block Park) primarily for residential use with ground floor retail.

Impacts to groundwater or soils are not likely because has been no identified contamination at Block Park and therefore, no mitigation measures are presented. However, if residential uses are proposed at this site it is recommended that an ESA be done at this Strategic Site.

Island Dock

As presented above in the Strategic Sites-Known Environmental Conditions, Section 4, and the Step 2 Nomination, and Phase I and Phase II investigations, contamination identified at the Island Dock site includes:

- VOCs in surface soil;
- SVOCs in surface soil;
- Metals in surface soil.

The preferred option for Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) is that be purchased by the City of Kingston, possibly with the participation and/ or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition. Existing trees would be preserved and small clearings created where

sculptural art can be displayed. At the eastern tip of the island, a small amphitheater is proposed. The softball diamond could be relocated to the south west corner of the parcel and parking lot with pavement would be located adjacent to it as vehicular traffic is restricted from Island Dock. A pedestrian bridge would connect the island to Hone Street on the mainland.

Per Phase II, the extent of VOC impacts has not yet been fully characterized. To minimize impacts, limited testing is warranted to determine the extent of any VOC contamination. The most likely remediation plan at Island Dock will be installation of a membrane covered with soil capping.

NOAH HOTEL

As presented above in the Strategic Sites-Known Environmental Conditions, Section 4 (Known Environmental Conditions), and the Step 2 Nomination, and Phase I and Phase II investigations, contamination identified at the Noah Hotel site includes:

 Unknown petroleum related to a former spill. However, the spill was closed and at this time, there is there are no additional environmental records or known environmental investigations related to this site.

The preferred option is a hotel with frontage and access on both the upper level. An additional two to four story commercial building will be co-located on the site for office space and to support industry. A series of public spaces consisting of terraced landscape areas would be located between the two buildings to create a green connection between the upper and lower levels and a municipal garage with parking would be designed into the hillside. Construction activities associated with the hotel and associated buildings and excavation activities associated with the hillside parking garage would disturb surface and subsurface soils and groundwater.

A Phase II investigation would be recommended to identify any petroleum contamination onsite prior to any redevelopment activities. If any contamination is identified, clean-up procedures would need to be developed and the site remediated to the required standards necessary to accommodate the preferred future site development.

TEMPORARY AND SHORT-TERM IMPACTS

Implementation of the BOA Plan will result in possible temporary and short-term impacts stemming from the potential construction activities related to project-specific activities at the Strategic Sites. These may include temporary impacts from to site runoff in stormwater, noise, dust and odor and during remediation of contamination.

STORMWATER

During construction of individual projects implementing the build-out of the Hudson Riverport Vision Plan, there will be potential for degradation to surface water quality from uncontrolled runoff carrying eroded soils and possible contaminants into Rondout Creek and the Hudson River. Individual Stormwater Pollution Prevention Plans (SWPPP) will be required for coverage under the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit (GP-0-15-002) for the treatment and management of Stormwater Discharges from Construction Activities associated with development of the Project that disturbs 1 acre or more. The purpose of the SWPPP is to prevent erosion at construction sites and sedimentation of downstream water courses. The SWPPP for each project will outline temporary erosion and sedimentation control measures, as well as permanent stormwater management practices for runoff reduction, water quality treatment and regulation of discharge rate and volume.

Mitigation measures identified in the Preliminary SWPPP include but are not limited to the following temporary and permanent erosion control/slope stabilization practices:

- Silt fence;
- Stabilized Construction Entrance;
- · Check Dams;
- Temporary stockpiling of topsoil, gravel, backfill, etc.;
- Initiating soil stabilization measures as soon as practical, and
- Best Management Practices (BMPs) for spill prevention and solid waste management.

NOISE

Given the ambient conditions in the existing urban setting of the BOA, impacts from noise are anticipated to be limited to short-term construction related noise. Remediation and redevelopment activities at the Strategic Sites may result in temporary and short term increases in noise levels associated with construction equipment such as backhoes, compactors, bulldozers and trucks. Noise produced by heavy equipment will vary throughout the day and during the entire construction period. During a typical work shift, construction equipment may be idling while preparing to perform a task or operating at maximum capacity. As a result, construction, operation, and hauling vehicle sound levels will vary. Average construction sound levels over a full construction work shift are expected to be considerably lower than peak levels. Once construction is complete, there would be an increase in noise levels from vehicular traffic and building operations associated with new facilities on the property.

Through the site plan review of each proposed development, the City has the ability to ensure there are adequate distances and landscaping to provide noise buffers between the specific site developments and adjoining parks/open space, residential or commercial properties.

Operation of heavy equipment during the construction phase of development would be temporary and restricted to typical day time work hours. Managing the hours at which the loudest of the operations can take place can provide additional mitigation of construction noise.

DUST

During construction of the individual implementation projects, dust and exhaust will be generated by construction activities and equipment. These impacts will be temporary in nature, however, and will not occur over prolonged periods of time. Construction impacts related to dust will be mitigated through best management practices including but not limited to:

• Requiring contractors to only use heavy equipment that is in proper working condition and fitted with all applicable safety, noise and emission equipment.

- Where applicable, typical construction dust suppression techniques will be employed such as watering of construction roadways and work areas as necessary to reduce fugitive dust from being transported off-site.
- Limiting on-site travel speeds.
- Installing stabilized construction entrances off of existing roads to avoid vehicle tracking dirt and mud onto areas roadways.

ODORS

Temporary impacts from odors resulting from clean-up of contaminated soils or groundwater at the Strategic Sites may occur during the implementation of the Hudson Riverport Vision Plan. The nature and intensity of odors will depend on the type and amount of contamination documented in future investigations. Therefore, mitigation of odor impacts will be addressed in the site-specific remedial action work plan that must be prepared for each site prior to clean-up activities.

UNAVOIDABLE ENVIRONMENTAL IMPACTS

The BOA Plan is designed to properly guide redevelopment of the Strategic Sites in a manner that lessens the potential negative impacts resulting from land use changes and development activities. The BOA Plan provides the City an opportunity to plan adequately and provide the proper tools to manage the preferred growth and redevelopment in the BOA; reducing the likelihood of potentially significant adverse environmental impacts.

The majority of the identified impacts from the BOA Plan will be sufficiently minimized through the Design Strategy, or where appropriate, mitigated. Therefore, it is not anticipated that implementation of the Hudson Riverport Vision Plan (as proposed) will result in significantly adverse impacts that cannot be mitigated.

All development actions taking place after the adoption of this BOA Plan and Generic EIS will still be subject to the SEQRA process on a site specific basis. Nothing contained in this document supplants the necessity of adequate environmental review of future actions. However, this BOA Plan will be a resource that can be used to facilitate the review under SEQRA of future development actions.

COMMITMENT OF RESOURCES

Implementation of the Kingston Riverport Vision Plan will require the irreversible and irretrievable commitment of certain human, material, natural, and financial resources, as described below. For the most part, commitments of these resources will be offset by the benefits that will result from implementation of the Project. Although a full range of site design features and environmentally-sound mitigation measures will be implemented to minimize these commitments, some resources will become unavailable for future use.

HUMAN RESOURCES

Human resources will be committed in order to develop the identified projects in the future. In order to design, permit, construct and operate the new facilities, labor will be necessary. Workers employed for design and construction will be unavailable for other construction projects during the same time frame.

ENERGY & MATERIAL CONSUMPTION

Energy resources also will be irretrievably committed to the Project, during both the construction and operation of future redevelopment projects. Fuel, lubricants, and electricity will be required during site preparation and construction activities for the operation of various types of construction equipment and vehicles, and for the transportation of workers and materials to project sites.

Various types of construction materials and building supplies will also be committed to future redevelopment projects; to a lesser extent for reuse of existing buildings. The use of these materials, such as gravel, concrete, steel, etc., will represent an irreversible commitment of these resources.

NATURAL RESOURCES

Implementation for the Hudson Riverport Vision Plan represents a commitment of land for the life of the development projects. Approximately 44 acres of currently vacant or underutilized land would be converted to impervious surfaces such as buildings, roads, and parking lots. However, given that the majority of the Strategic Sites have been intensively developed in the past and are no longer in natural state, the net loss of natural resources will be minimal. Redevelopment of the Island Dock as a park and passive open space will facilitate permanent naturalization of that area. Design Strategies in Section 6 of the BOA Plan emphasize redevelopment utilizing resilient and low impact design in order to minimize the negative impacts on natural resources. Therefore, implementation of the Hudson Riverport Vision Plan is not anticipated to result in significant negative environmental impacts to the existing natural resources within the BOA.

FINANCIAL RESOURCES

Financial resources have already been and will continue to be expended by the private landowners, City of Kingston, DEC and DOS for the development of BOA Step 2 Nomination and Step 3 studies, environmental investigations and remediation to-date. The expenditure of funds and human resources will continue to be required throughout the design, permitting and construction phases of future redevelopment projects (e.g., for environmental reviews and permitting, site plan approval, remediation, and construction).

Development capital expenditures refers to the costs associated with construction including engineering, financial, legal and other professional services, labor and materials, and financing. Included in these costs are the premiums for insurance and other risks that are part of any type of construction/development venture. The commitment of these resources makes them unavailable for other uses.

There will also be costs associated with the daily operations of the facilities. The commitment of these monetary resources to operate and maintain the site facilities makes them unavailable for other uses. However, the redevelopment of the catalyst projects at the Strategic Sites is anticipated to create additional economic development opportunities (see Section 4)

GROWTH-INDUCING ASPECTS

The Kingston Waterfront BOA represents a currently underutilized portion of the City. Many of the former industrial uses are no longer operating and the land and facilities are vacant and potentially available for redevelopment. The underlying purpose of the BOA program is to identify vacant, underutilized or abandoned brownfield sites for plan for their remediation and redevelopment. This BOA Plan has selected five Strategic Sites whose redevelopment would serve as catalysts for further revitalization of the waterfront area.

Therefore, implementation of the BOA Plan is intended to be growth-inducing; primarily Commercial/Retail/Office, Mixed-Use Commercial/Residential, and enhancements to parks and open space. The existing zoning of the BOA study area allows the majority of the recommended preferred land uses and development scenarios.

It is anticipated that secondary growth resulting from redevelopment of the Strategic Sites will not result in significant adverse impacts for the following reasons:

- The Proposed Action is not likely to result in significantly different land uses or at greater densities than would be allowed under existing zoning if the area were to build out without the benefit of the BOA Plan.
- The anticipated 426 of new residential units represents an increase of 3% of the total housing units projected for 2033 in the City.
- The design strategies outlined in this BOA Plan will help to control and better direct growth within the waterfront area.
- Implementation of the larger cohesive vision plan will be incremental. The phasing
 intends for the long-term vision to guide decisions and allow markets to be established
 to absorb later and larger developments.
- Where necessary, environmental cleanup will be designed and conducted in accordance with applicable NYSDEC guidance and precede development activities. The proposed future land use(s) will dictate the level of remediation and therefore clean-up cost.
- The design strategies include resilient designs and sustainability.

Potential positive impacts from the Proposed Action include:

- The Proposed Action will generate new job opportunities which potentially will be filled by residents of the City and Ulster County.
- The Project will provide secondary economic benefits to local vendors and suppliers used for construction, by future employees and by visitors.
- An increase in City and County property taxes generated by implementation of the Hudson Riverport Vision Plan has the potential to drive local property tax rates lower.
- New businesses can have a multiplier effect in the larger local economy. A multiplier can be used to summarize the total impact to be expected from an economic activity (e.g., the presence of a manufacturer or service industry). Economic multipliers usually range between 1.0 and 3.0 and vary by the amount of economic activity within an area and the interaction of industries within the area. While the value of a multiplier associated with the Proposed Action has not been calculated, considerable economic value is created and distributed as a result of bringing one or more new businesses into an area. An illustration of the economic ripple effect might include a new employee who spends his/her wages locally on goods or services provided by a local vendor who in turn spends their earnings on goods and services provided by another local vendor.

EVALUATION OF ALTERNATIVES

PREFERRED ALTERNATIVE

The Hudson Riverport Vision Plan is the preferred alternative for the redevelopment of the Kingston Waterfront BOA. The design elements of the BOA Plan are described in detail in Section 6 (Design Strategy) and 8 (Project Description/Proposed Action). This section satisfies the SEQRA requirement for an evaluation of reasonable alternatives stated in 6NYCRR §617.9(b)(5)(v).

Where sufficient information is known, potential impacts have been identified; assessed to the extent possible; and where appropriate, mitigation measures have been identified in Section 8. The following provides a summary of the potential short term and long term environmental impacts likely to occur if the preferred alternative is built-out.

IMPACTS TO LAND USE

The most significant impact to land use will be the permanent conversion of 40 acres of land from its current vacant condition to residential, mixed-use residential/ commercial, and parks/open space. Impacts to land use for the preferred alternative are positive in nature. No mitigation will be necessary.

IMPACTS FROM FLOODING

The majority of the BOA lies in the Floodway Fringe, or the area of allowable encroachment. According to the FIS and FEMA standards, development could occur in the Floodway Fringe without increasing the 1% Base Flood elevation more than 1.0 foot. However, (re)development in the Floodway Fringe will still be subject to flooding.

Possible mitigation measures include:

- Fortification;
- Accommodation elevation of structures and design for passage of waters. (City Zoning requires new residential and non-residential structures to be elevated to at least 2 feet above the effective BFE elevation of 8.2, resulting structure elevation 11.2.);
- Relocation;
- Zoning modification;
- Fringe land filling, and
- Flood barriers and levees (not appropriate for all sites).

Depending on the location and detailed design of project-specific structures, the potential for impacts from flooding remains for any alternative that include redevelopment of the strategic sites.

IMPACTS TO HISTORIC RESOURCES

Direct effects to historic structures may include renovations and improvements to historic structures located at the Strategic Sites or elsewhere in the BOA. As presented, the preferred plan does not directly impact any historic structures. However, Island Dock is a unique property and the Noah Hotel site is located in a NRHP- registered historic district. Therefore, future development on those sites may require additional consultation with the OPRHP once project-specific plans are proposed.

IMPACTS TO ARCHAEOLOGICAL RESOURCES

The entire BOA is located in an area(s) designated as archaeologically sensitive. Therefore, once project-specific plans are proposed further consultation with OPRHP will be required as part of future project-specific SEQRA assessment(s).

VISUAL IMPACTS AND IMPACTS TO AESTHETIC RESOURCES

There would be little to no visual impact of the redeveloped sites to the existing scenic waterfront. The redevelopment designs of the Strategic Sites include strategies to add additional greenspace and enhance the aesthetics of the waterfront, offering an overall aesthetic improvement at each of the Strategic Sites.

Once project-specific designs are proposed, it is anticipated that a more detailed assessment of the visual impacts from any redevelopment project over 1 - 2 stories should be done as part of the site plan and SEQRA reviews.

IMPACTS ON OPEN SPACE AND RECREATION

- Improvements in access and boardwalks at Kingston Point Park (positive impacts).
- The possible purchase of Island Dock by the City of Kingston with the help of intermediate entities could result in a net increase of 24 acres of parkland.
- The capitol costs to re-locate/re-build the existing park facilities.

IMPACTS ON TRANSPORTATION

- Prior to future development of the BOA projects, a more complete assessment of the transportation systems will need to be completed.
- Proposed improvements such as a trolley service and Kingston Greenline will create a network of urban trails, complete streets, bike lanes and linear parks in the City of Kingston to lessen the impact of vehicular traffic.
- Improvements will be needed to existing road network to accommodate accessible pedestrian accommodations and reduce traffic impact.

IMPACTS TO INFRASTRUCTURE

- Based on the projected domestic water demand the BOA Plan will not have a significant impact on the Kingston public water system.
- Based on the projected wastewater flow the BOA Plan will not have a significant impact on the Kingston public sanitary sewer system.
- Based on CSO water quality monitoring conducted in 2014 it was concluded that Rondout Creek was not impaired or precluded from meeting the applicable Water Quality Standards for Class C waters.

IMPACTS FROM CONTAMINATION

- Varying degrees of contamination has been detected at most of the Strategic Sites.
 Prior to future redevelopment activities, additional environmental studies are anticipated to be needed at most of the Strategic Sites.
- Prior environmental studies have indicated that suspect asbestos containing materials may be present in structures as some of the strategic sites. Suspect materials should be sampled and managed in accordance with all applicable New York State and Federal laws and regulations prior to any building demolition, renovation, or other invasive building activities.
- Prior to future redevelopment activities, remediation of most of the Strategic Sites may be needed.

"NO ACTION" ALTERNATIVE

Consideration of the No-Action Alternative establishes a baseline for assessing the relative impacts and benefits of the proposed action. The discussion of the No-Action Alternative is intended to describe and evaluate the adverse and/or beneficial impacts that are likely to occur on the site and in the community in the absence of the Proposed Action.

The No-Action Alternative means that the Proposed Action (implementation of the BOA Plan) would not occur. Under this scenario, the City, State and development agencies would not promote to the same degree the funding and implementation of the preferred redevelopment strategies. Therefore, a coordinated redevelopment of the BOA is less likely to occur, and

- Strategic Sites are more likely to remain vacant and underutilized.
- The visual setting would remain the same.
- Environmental benefits that would result from remediation of the brownfields are less likely to occur.
- Potential economic benefits anticipated from revitalization activities and new business employment is less likely to result.

ALTERNATIVE SIZE AND SCALE

Section 6 (Design Strategies) presents design alternatives for each of the Strategic Sites.

THE KOSCO ASSEMBLAGE

The alternative would have 15,000 SF less total development and no residential units and no buildup of shoreline. There would be less development water side of the trolley tracks. Because there would be a smaller total developed area there would be less traffic, or demand for public utilities.

THE LANDING

The alternative design would have a smaller foot print of only 35,000 SF and more landscaping with boardwalk access to the water. Because there would be a smaller commercial footprint the alternative design may result in less traffic or demand for public utilities.

MILLENS

The alternative design for the Millens site would not include assemblage with the adjoining property. Instead of a hotel development the site would be utilized as a small scale (20,000 SF) civic and event destination with supporting classroom space. There would be less wetland impacts, and because there would be a smaller footprint, the alternative design may result in less traffic or demand for public utilities.

BLOCK PARK/ISLAND DOCK

Under the alternative design, there would not be a land purchase by the City of Kingston. Block Park would remain a City–owned park with no proposed changes. Island Dock and the former Block Plant would remain privately held and available for development as a small-scale mixed-use community of 650,000 SF including 400 residential units. The alternative would result in less visual change at Block Park, but more visual impact from greater building heights on Island Dock. Development on Island Dock would require greater demand for public utilities and create transportation challenges due to its limited street access.

NOAH HOTEL SITE

The alternative design would eliminate the hotel and have separate upper and lower level development pads. The upper level development is reserved to small scale residential on Abeel Street. The lower level development is retail that focuses on the recreation boaters and flexible work space/office space.

The commercial footprint would be smaller with 125,000 SF and 40 housing units. Because there would be a smaller footprint the alternative design may result in less traffic or demand for public utilities.

ALTERNATIVE USES OF THE STRATEGIC SITES

With or without the adoption and implementation of this BOA Plan, the City will likely still receive independent proposals for redevelopment of the privately held properties located within in the BOA; although not in the same coordinated or complimentary manner as proposed in the Hudson Riverport Vision Plan.

Alternative uses that would be allowed in the BOA are controlled by the zoning. The BOA Plan does not recommend land uses that are significantly different than those land uses allowed by the current zoning. Therefore, the build-out of the BOA without the benefit of the BOA Plan is likely to result in similar land uses as recommended by the Plan. One exception is the BOA Plan does not emphasis manufacturing or processing of products as allowed in the General Manufacturing District (M-2).

As brownfield, vacant and underutilized properties are redeveloped, it is anticipated that existing non-conforming land uses in the BOA will be replaced by uses currently permitted in zoning and recommended by the BOA Plan.

It is not anticipated the implementation of the BOA Plan would result in impacts significantly different than if the waterfront area is redeveloped with land uses allowed under the current zoning. However, the adoption of this BOA Plan will facilitate the City's ability to better manage growth and redevelopment, and reduce potential environmental impacts.

THRESHOLDS FOR FUTURE SEQRA REVIEW

Because this BOA Plan and SEQR assessment serves as a Generic EIS, it is broader and more general than a conventional EIS. The intent is to set forth specific conditions for future subsequent review and SEQRA compliance during the review and approval process of individual redevelopment activities that will implement the Hudson Riverport Vision Plan (the BOA Plan).

Thresholds and criteria for future review are established to help ensure that private development proceeds in accordance with the BOA Plan. This may include thresholds and criteria for supplemental EIS's to reflect site-specific impacts that cannot adequately be addressed at this time in the BOA Plan/DGEIS.

LAND USE

The Hudson Riverport Vision Plan established preferred land use patterns that generally fit into existing zoning. If future project-specific proposals for the redevelopment of the Strategic Sites do not meet the specific permitted uses in the current zoning code, or exceed the preferred land use plan, then the proposed development may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.

It is not the intent of this BOA Plan to encourage or support projects that are substantially inconsistent with the Kingston 2025: Comprehensive Plan, 2015 or the Local Waterfront Implementation Plan, 2002. If future project-specific proposals for the redevelopment of the Strategic Sites are substantially inconsistent with the Comprehensive Plan or Local Waterfront Implementation Plan, then the proposed development may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.

NATURAL RESOURCES

Proposed implementation projects should not be located within a designated State or Federal wetland or within a 100' buffer of a State wetland. Projects should be designed to avoid the wetland to the maximum extent possible or minimize the footprint; if not, wetland mitigation would most likely be required. Future project-specific proposals that impacts wetlands to the extent that require permitting or mitigation may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.

Development in the floodway fringe is an allowable permitted use according to FEMA minimum standards. If project-specific proposals are not designed to meet the following conditions, then they should be subject to a new project-specific SEQR assessment:

- Development in the floodway fringe must be designed to incorporate appropriate flood proofing measures.
- Redevelopment activities are subject to the requirements of Local Law Section 405-26. Specifically, all new residential and non-residential structures shall be designed in accordance section 405-26.G.
- Individual development proposals should consider the strategies and recommendations of the City of Kingston Tidal Waterfront Flooding Task Force from their final report dated 9/18/2013.
- Individual development proposals should consider the recommendations and criteria in the East Strand Street Flooding and Stormwater Management Analysis final report dated 2/19/2014.

• The planning criteria for future Sea Level Rise for new development should be consistent with the anticipated life of the proposed new facilities.

CULTURAL RESOURCES

Additional consultation with the OPRHP will be required for future site-specific redevelopment projects that include ground disturbance or are located in Rondout Creek and/or the Hudson River. Consultation with OPRHP should be undertaken early in the design and application process and will need to be documented as part of any future project-specific SEQRA assessment(s).

VISUAL IMPACTS

Once project-specific designs are proposed, an assessment of potential visual impacts should be required for each project proposing structures over 1-2 stories. The visual impact assessment may include viewshed analysis to determine where the new development will be visible from and line-of-sight diagrams to facilitate an assessment of their level of impact

OPEN SPACE AND RECREATION

It is anticipated that implementation/full build-out of the BOA Plan will impact publiclyowned parkland or open space, including Block Park/Island Dock, and Kingston Point Park/Kingston Beach. The proposed land swap of Block Park for Island Dock/former Block Plant, will require legislative approvals and implementation costs not completely addressed by this SEQR assessments and should be subject to further review under SEQR.

TRANSPORTATION

As project-specific proposals are made for the redevelopment of the Strategic Sites, a more complete assessment of their potential impact to the transportation systems will need to be completed. A typical threshold to determine when a project will require a Transportation Impact Analysis is if the proposed development adds 100 vehicles in the adjacent roadways' peak hour traffic generation or the development's peak hour traffic generation exceeds 100 vehicle trips and/or requires infrastructure improvements to public streets or roads including traffic control devices.

INFRASTRUCTURE

- Water: Individual projects that require public infrastructure improvements to deliver adequate water supply to the site to support the project.
- Wastewater: Individual projects that generate wastewater of a volume, rate, or composition that exceeds the capabilities of the local Municipal sanitary sewer system and/or Publicly Owned Treatment Works.
- Stormwater: Individual projects which involve soil disturbance of 1 or more acres will be subject to the Federal, State and local requirements for stormwater discharges. Eligibility under the SPDES General Permit for Stormwater Discharges from Construction Activities may not be applicable to all BOA redevelopment projects. If not, then projects may require an individual SPDES permit, as well as other Federal, State and local permits.

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Citizen Participation Plan for B. Millens Scrapyard, NYSDEC, Sterling Environmental Engineering, P.C., May 2015.

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