

APRIL 2024

# **BROOME COUNTY**

LOCAL WATERFRONT REVITALIZATION STRATEGY

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# ACKNOWLEDGMENTS

## PROJECT TEAM

The development of this Plan was a collaborative effort between Broome County, its municipalities, and multiple community stakeholders. The Broome County Department of Planning provided invaluable guidance and expertise throughout the process. Gratitude is extended to the following team members for their dedication and contributions:

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## INTRODUCTION

# OVERVIEW OF THE LOCAL WATERFRONT REVITALIZATION STRATEGY

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The New York State Local Waterfront Revitalization Program (LWRP) provides assistance to communities to develop programs that address local and regional waterway issues, guide future development and promote public waterfront access. Broome County has prepared a Local Waterfront Revitalization Strategy (LWRS) that can serve as the basis for individual communities, within the designated boundary, to advance their own LWRP's for the land and water proximate to and along the Chenango, Delaware, Susquehanna, and Tioughnioga Rivers and Nanticoke Creek.

Information contained within the Broome County LWRS can be extracted and synthesized into documents for individual municipalities, resulting in a municipal LWRP, which can then be adopted by the local community and approved by the New York State Department of State. The development of a Local Waterfront Revitalization Strategy for Broome County supports the objective of communities adopting LWRP's, and provides a collaborative framework to equitably address interlinked flooding, habitat, and economic challenges throughout the region. As individual communities advance municipal-specific programs, municipal LWRP's will provide communities with the tools and local regulatory controls to guide development on their waterfront lands.

# INTRODUCTION

*A Local Waterfront Revitalization Strategy provides numerous benefits to participating communities, including: clear direction, technical assistance, state consistency, and financial assistance.*

## **Establishment of the NYS LWRP:**

*The Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Article 42 of New York State Executive Law) was enacted in 1981 by the New York State Legislature in order to implement the State's Coastal Management Program at the state and federal level. The Coastal Management Program strives to protect natural coastal resources; advance economic development opportunities; and enhance waterfront opportunities and experiences.*

**A range of community engagement techniques were employed throughout the planning process to obtain input and feedback from the public regarding future land use objectives and priority projects within the Waterfront Revitalization Area (WRA). The input received through this process was synthesized into a community vision and goal framework. This identified vision and goal structure is intended to guide the implementation of projects in the Broome County WRA. Additional information about public involvement can be found later in this document.**

## **OVERVIEW**

Broome County celebrates an inclusive, resilient waterfront steeped in ecological and cultural assets that unite communities across the Chenango, Delaware, Susquehanna, and Tioughnioga River valleys. This waterfront intersection of vibrant waterways and social hubs represents the soul of the County—where residents and visitors alike gather to experience the County's water resources. Through integrated strategies crafted by local leaders and stakeholders, this community-driven legacy will model how strategic development alongside natural infrastructure grows jobs, restores and preserves habitats, and expands access to the rivers that have long been the County's lifeline.

### **Establishing a Unified Vision**

Realizing the vision of an inclusive, resilient waterfront where all can thrive requires advancing strategic priorities around access, the economy, capacity building, partnerships, and conservation. This plan provides a planning framework and identifies goals and projects needed to support the activation and enhancement of a countywide WRA. The goals of this plan include and are summarized on the following page:

- Provide enhanced and equitable water access
- Improve connectivity between waterfront destinations
- Build partnerships with local and regional entities
- Identify strategic initiatives to enhance planning capacity
- Support economic growth
- Preserve and protect the region's natural resources

# WATERFRONT REVITALIZATION GOALS



## Provide enhanced and equitable water access

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Expand inclusive public access to waterfront resources through new and enhanced boat launches, trails, parks, and recreational amenities.



## Identify strategic initiatives to enhance planning capacity

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Prioritize studies around flooding, land use, habitat, and recreation while bolstering administrative leadership and technical expertise to equip evidence-based decision-making for strategic waterfront enhancements.



## Improve connectivity between waterfront destinations

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Strategically connect cross-municipality destinations through recreational trails and conservation networks to enhance quality-of-life, resilience, inclusion, and prosperity goals county-wide.



## Support economic growth

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Leverage the wealth of recreational, ecological, and cultural assets rooted along Broome County's waterways to revitalize communities.



## Build partnerships with local and regional entities

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Foster partnerships with governmental, non-profit, community, and private sector stakeholders across jurisdictions to increase capacity for coordinated investments along the WRA.



## Preserve and protect the region's natural resources

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Locally tailor policies, incentives, and programs to protect wetlands, nourish habitats, celebrate environmental arts, and integrate green infrastructure to support biodiversity and resilience priorities.





## SECTION 1

# BOUNDARIES OF THE WATERFRONT REVITALIZATION AREA

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This Section provides a detailed description of the Broome County Waterfront Revitalization Area (WRA), including the methodology used to delineate the WRA and the justification for how the boundary was established.

The WRA is structured around the County's designated inland waterways, as defined by New York State Executive Law, Article 42, Section 911. The WRA consists of the Chenango, Delaware, Susquehanna, and Tioughnioga Rivers and Nanticoke Creek, the shorelines and all lands within approximately 500 feet of these waterways, and significant natural, recreational, cultural, and economic resources with direct connections to these waterways.

For future Local Waterfront Revitalization Plan (LWRP) development, each municipality must establish its own distinct boundary. Please refer to Appendix A for more information on each municipality's boundary.

## SECTION 1.1

# BOUNDARY DESCRIPTION

### Designated Inland Waterways:

**Chenango River**

**Delaware River**

**Nanticoke Creek**

**Susquehanna River**

**Tioughnioga River**

### Length of Designated Inland Waterways in WRA:

**Chenango River:** 13 miles

**Delaware River:** 6.5 miles

**Nanticoke Creek:** 21 miles

**Susquehanna River:** 40.5 miles

**Tioughnioga River:** 17 miles

### Total Area of the WRA:

**44,460 acres**

(Land and Water)

### OVERVIEW & BOUNDARY JUSTIFICATION

The WRA boundary includes all designated inland waterways<sup>1</sup> in Broome County as well as all lands within at least 500 feet of the waterways' shorelines. The WRA boundary expands beyond 500 feet from the designated inland waterway shorelines in locations where state parks, federal lands, or other significant natural, cultural, and/or economic resources occur with a direct connection to an inland waterway. Specifically, the boundary expands beyond 500 feet in several locations to capture downtowns and village centers located proximate to the waterfront in order to strengthen the natural relationship and connectivity between centers of economic activity and the rivers.

The WRA boundary predominantly follows and is defined by roadways and municipal, county, and state boundaries. The Broome County border establishes the WRA boundary in several locations:

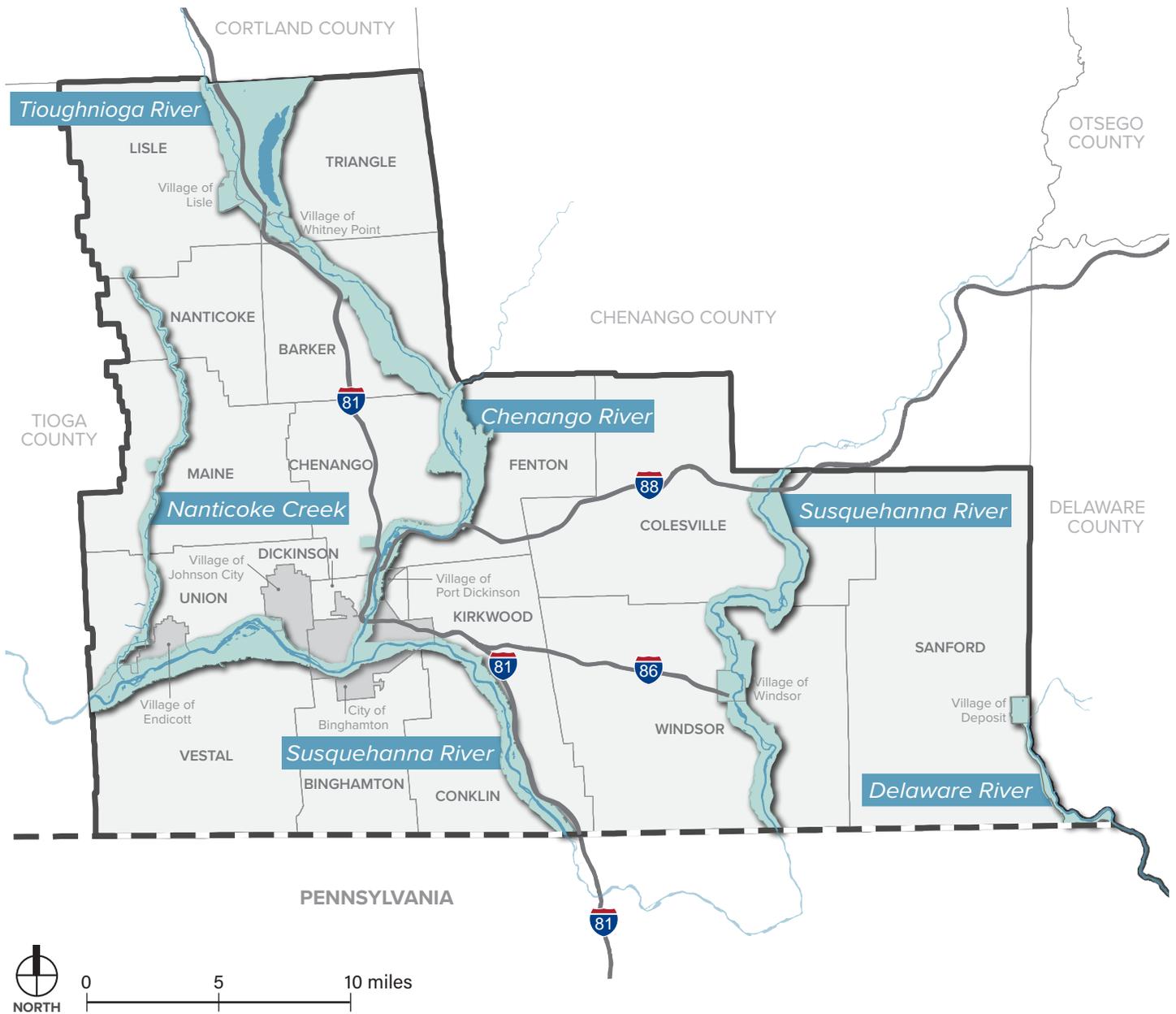
- Northernmost boundary of the WRA is located in the northwestern part of the county, along the Tioughnioga River, the Susquehanna River, and the Chenango River;
- Westernmost boundary of the WRA extends from the south to the western part of the county, along the Susquehanna River;
- Southernmost boundary of the WRA is located in the southernmost central part of the County, along the Susquehanna River and the Delaware River; and,
- Easternmost boundary of the WRA along the Delaware River.

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<sup>1</sup>Designated inland waterways are defined by New York State Executive Law, Article 42, Section 911.

BOUNDARY: WATERFRONT REVITALIZATION AREA

Waterbodies / Waterways Waterfront Revitalization Area



## SECTION 1.1

# BOUNDARY DESCRIPTION (CONT.)

The following sections provide a detailed description of the WRA boundary along each designated inland waterway.

### TIOUGHNIOGA RIVER

This stretch of the Tioughnioga River extends from its confluence with the Chenango River north to the Cortland County line and travels through the following municipalities:

- Town of Barker
- Town of Triangle
- Town of Lisle
- Village of Whitney Point
- Village of Lisle
- Town of Chenango

### Western Boundary

This boundary description begins at the confluence of the Chenango River and proceeds north, following the Tioughnioga River, to the Cortland County line.

Beginning at the intersection of NYS Route 12 and Parsons Road, just west of the confluence of the Tioughnioga and Chenango Rivers, the WRA boundary proceeds north along Knapp Hill Road and extends 500 feet to the west of the roadway centerline or is defined by the rear lot lines of the parcels fronting on the western side of Knapp Hill Road, whichever is less.

At the intersection of Knapp Hill Road and King Street, the WRA boundary proceeds north along King Street and extends 500 feet west of the roadway centerline or is defined by the rear lot lines of the parcels fronting on the west side of King Street, whichever is less.

At the intersection of King Street and Barker Hill Road, the WRA boundary proceeds west along Barker Hill Road and extends 500 feet south of the roadway centerline or is defined by the rear lot lines of the parcels fronting on the south side of Barker Hill Road, whichever is less. Just south of the intersection of Barker Hill Road and U.S. Route 11, the WRA boundary follows the centerline of Biede Kapp Road north to I-81 and then proceeds north along the eastern side of I-81.

At the intersection of Ellerson Road and U.S. Route 11, the WRA boundary proceeds east, approximately 450 feet, from I-81 and then continues north along U.S. Route 11. From Ellerson Road to the Village of Whitney Point, the WRA follows U.S. Route 11 and extends 500 feet west of the roadway centerline or is defined by the rear lot lines of the parcels fronting the western side of U.S. Route 11, whichever is less. Where U.S. Route 11 intersects the Village of Whitney Point, the village boundary defines the WRA until Whitney Point-Lisle Road intersects the northern border of the village.

The WRA then proceeds north along Whitney Point-Lisle Road and extends 500 feet west of the roadway centerline or is defined by the rear lot lines of parcels fronting on the western side of Whitney Point-Lisle Road. Where Whitney Point-Lisle Road intersects the Village of Lisle, the village boundary defines the WRA until Whiting Hill Road intersects the northern border of the village.

The WRA then proceeds north along Whiting Hill Road and then Killawog Hill Road to the Cortland County line. The WRA extends 500 feet west of Whiting Hill and Killawog Hill Roads or is defined by the rear lot lines of parcels fronting on Whiting Hill and Killawog Hill Roads, whichever is less.

### Eastern Boundary

This boundary description begins at the Cortland County line and proceeds south, following the Tioughnioga River, to the confluence of the Chenango River.

Beginning where NYS Route 26 intersects the Cortland County line, the WRA boundary follows NYS Route 26 south and extends 500 feet from the roadway centerline or is defined by the rear lot lines of parcels fronting on the east side of NYS Route 26, whichever is less. Where NYS Route 26 intersects the Village of Whitney Point, the village boundary defines the WRA until NYS Route 79 intersects the southern border of the village.

The WRA then proceeds south along NYS Route 79 and extends 500 feet east of the roadway centerline or is defined by the rear lot lines of the parcels fronting the eastern side of NYS Route 79, whichever is less. Where NYS Route 79 intersects NYS Route 12, the WRA boundary along the Tioughnioga River merges with the WRA boundary along the Chenango River.

### CHENANGO RIVER

This stretch of the Chenango River extends from the northern City of Binghamton border to the Chenango County line and travels through the following municipalities:

- Village of Port Dickinson
- Town of Dickinson
- Town of Chenango
- Town of Fenton

### Western Boundary

This boundary description begins at the northern boundary of the City of Binghamton and proceeds north, following the Chenango River, to the Chenango County line.

Beginning where I-81 crosses the northern boundary of the City of Binghamton and proceeding north, the western extent of the WRA boundary is defined by southbound I-81 and then by the western edge of Old Front Street. Where Terrace Drive intersects Old Front Street, the boundary proceeds north along Old Front Street to U.S. Route 11 and is defined by the rear lot lines

of parcels fronting on the western side of Old Front Street.

At the intersection of Old Front Street and U.S. Route 11, the western extent of the WRA boundary proceeds north along U.S. Route 11 to Wolfe Park and extends 500 feet west of the roadway centerline or is defined by the rear lot lines of the parcels fronting on the west side of U.S. Route 11, whichever is less.

Where I-81 crosses U.S. Route 11, the WRA boundary expands west to include Wolfe Park and then returns to follow U.S. Route 11 and then NYS Route 12 north along the Chenango River. From Wolfe Park to NYS Route 12A (Chenango Bridge Road), the western extent of the WRA boundary proceeds north along U.S. Route 11 / NYS Route 12 and extends 500 feet west of the roadway centerline or is defined by the rear lot lines of the parcels fronting on the west side of U.S. Route 11 / NYS Route 12, whichever is less.

At the intersection of NYS Routes 12 and 12A, the boundary proceeds east along NYS 12A, then Oak Drive, then Main Street, and then River Road. The northern extent of the WRA boundary is defined by the rear lot lines of the parcels fronting on these roads.

At the intersection of River Road and Columbine Drive, the boundary proceeds east, north, and then west along River Road to the intersection of NYS Route 12 and extends 500 feet north/west/south of the roadway centerline or is defined by the rear lot lines of the parcels fronting on the north/west/south side of River Road, whichever is less.

At the intersection of River Road and NYS Route 12, the boundary proceeds north along NYS Route 12 to Knapp Hill Road and extends 500 feet west of the roadway centerline or is defined by the rear lot lines of the parcels fronting on the west side of NYS Route 12, whichever is less.

## SECTION 1.1

# BOUNDARY DESCRIPTION (CONT.)

At Knapp Hill Road, the WRA boundary along the Chenango River merges with the western extent of the WRA boundary along the Tioughnioga River. East of the Tioughnioga River, from the intersection of NYS Routes 12 and 79, the boundary proceeds east along NYS Route 12 approximately 1,500 feet and is defined by the rear lot lines of parcels fronting on the north side of NYS Route 12. The boundary then continues east along NYS Route 79 to the Chenango County line and is defined by the rear lot lines of parcels fronting on the north side of NYS Route 79.

### Eastern Boundary

This boundary description begins at the Chenango County line and proceeds south, following the Chenango River, to the northern boundary of the City of Binghamton.

Beginning where the Chenango County line crosses the Chenango River, the WRA boundary proceeds south to NYS Route 79 and then travels approximately 150 feet west to Pigeon Hill Road. The boundary extends 500 feet south / east of Pigeon Hill Road or is defined by the rear lot lines of parcels fronting on the southern / eastern side of Pigeon Hill Road, whichever is less.

At the intersection of Pigeon Hill Road and State Park Road, the WRA boundary continues east to NYS Route 369 and includes all state-owned property along State Park Road. The WRA boundary follows NYS Route 369 south to Ganoungtown Road, and includes all parcels with frontage along NYS Route 369 as well as any immediately adjacent state-owned parcels. From the intersection of NYS Route 369 and Ganoungtown Road, the WRA boundary proceeds south along NYS Route 369 and extends 500 feet east of the roadway centerline or is defined by the rear lot lines of parcels fronting on the eastern side of NYS Route 369, whichever is less.

At the intersection of NYS Route 369 and Albany Street, the WRA boundary follows the southern edge of I-88 until it reaches Chenango Street. The WRA then follows Chenango Street south until it reaches the northern border of the City of Binghamton. The WRA extends 500 feet east of Chenango Street or is defined by the rear lot lines of the parcels fronting on the eastern side of Chenango Street, whichever is less.

The WRA continues south until it reaches the railroad lines. The WRA encompasses the city and is bordered by the railroad lines or U.S. Route 11 to the east and U.S. Route 11 and Riverside Drive to the west, whichever is less.

### SUSQUEHANNA RIVER IN WESTERN BROOME

This stretch of the Susquehanna River extends from Tioga County east to the Pennsylvania state line and travels through the following municipalities:

- Town of Vestal
- Town of Union
- Town of Binghamton
- Town of Conklin
- Town of Kirkwood
- Village of Endicott
- Village of Johnson City

### Southern/Western Boundary

This boundary description begins at the Tioga County line in Vestal, New York and proceeds east to the Pennsylvania state line.

The southern extent of the WRA boundary is defined by the rear lot line of parcels fronting on the south side of Vestal Parkway from the Tioga County Line east to the intersection of Parkwood Road.

From Parkwood Road to the intersection of Arch Drive, the boundary is defined by the rear lot lines of parcels located along Vestal Parkway.

From Arch Drive to Clayton Avenue, the boundary resumes being defined by the rear lot lines of parcels fronting on the south side of Vestal Parkway (even though some of the parcels have addresses on Front Street or intersecting streets).

At Clayton Avenue the boundary is expanded south to include Memorial Park, which is owned by the Town of Vestal and located just north of Clayton Avenue Elementary School. East of Memorial Park, the boundary continues to be defined by the rear lot lines of parcels fronting on the south side of Vestal Parkway until just west of the African Road intersection.

At the African Road and Vestal Parkway intersection, the boundary is expanded to the south to include African Road Park. From African Road to Jensen Road, the boundary is defined by the rear lot lines of parcels fronting along the south side of Vestal Parkway.

East of Jensen Road, the boundary is formed by the rear lot lines of parcels fronting on Chalbourn Road, where such lot lines are parallel to Vestal Parkway. East of Chalbourn Road to the Binghamton city line, located approximately at Clubhouse Drive, the boundary resumes being defined by the rear lot lines of parcels fronting on the south side of Vestal Parkway.

The boundary continues east in the City of Binghamton to the intersection of South Washington Street and Conklin Avenue. From this intersection, the boundary proceeds north along South Washington Street to Conklin Avenue and then east along Conklin Avenue, extending 500 feet south of the roadway centerline or defined by the rear lot lines of parcels fronting on the south side of Conklin Avenue, whichever is less.

From the eastern border of the City of Binghamton to the Pennsylvania state line, the WRA boundary follows NYS Route 7 and extends 500 feet south/west of the roadway centerline or is defined by the rear lot lines of parcels fronting on the south/west side of NYS Route 7, whichever is less.

## Northern/Eastern Boundary

This boundary description begins at the Pennsylvania state line in the Town of Kirkwood and proceeds north and then west along the Susquehanna River to the Tioga County line in the Town of Union.

Beginning at the Pennsylvania state line and proceeding north to Crescent Drive, the boundary follows U.S. Route 11 and extends 500 feet east of the roadway centerline or is defined by the rear lot lines of parcels fronting on the eastern side of U.S. Route 11 (Kirkwood Avenue), whichever is less. At the intersection of U.S. Route 11 and Crescent Drive, the boundary proceeds north, following the centerline of Crescent Drive and expanding to include Valley Park. The boundary then proceeds west and is defined by the north side of NYS Route 17 Ext. to the intersection of Colesville Road.

From Colesville Road west to the boundary of the City of Binghamton, the northern extent of the WRA boundary follows U.S. Route 11 and extends 500 feet north of the roadway centerline or is defined by the rear lot lines of parcels fronting on the north side of U.S. Route 11, whichever is less. At the intersection of U.S. Route 11 and the City of Binghamton, the boundary follows the Binghamton city line south to cross the Susquehanna River and merge with the southern extent of the WRA boundary in the Town of Conklin.

The boundary continues within the City of Binghamton, and the northern extent of the WRA boundary is defined by the point where Riverside Drive intersects with the western border of the City of Binghamton. From this intersection, the boundary follows Riverside Drive to the west until it reaches Floral Avenue. Along this segment, the boundary is defined by the rear lot lines of parcels fronting on the north side of Riverside Drive.

At Floral Avenue, the boundary follows the eastern edge of NYS Route 201 north to NYS Route 17C (Main Street). At the intersection of NYS Routes 17C and 201, the boundary proceeds west and is defined by the rear lot lines of parcels fronting on NYS Route 17C. Where NYS Route 17 passes over Route 17C, the boundary continues west and then south along the northern/western edge of NYS Route 17C to the intersection of Hooper Road.

## SECTION 1.1

# BOUNDARY DESCRIPTION (CONT.)

From Hooper Road west to Jefferson Avenue, the northern extent of the boundary is defined by the rear lot lines of parcels fronting on the north side NYS Route 17C (East Main Street). At Jefferson Avenue, the boundary expands north to include the George F. Johnson Memorial Library and the Village of Endicott Visitors Center (300 Lincoln Avenue). From the northwest corner of the Visitor Center parcel, the boundary proceeds west to Nanticoke Creek and resumes being defined by the rear lot lines of parcels fronting on the north side of NYS Route 17C.

Where NYS Route 17C crosses Nanticoke Creek, this portion of the boundary merges with the Nanticoke Creek boundary description (see section below). From Nanticoke Creek west to the Tioga County line, the WRA boundary follows NYS Route 17C and extends 500 feet north of the roadway centerline or is defined by the rear lot lines of parcels fronting on the north side of NYS Route 17C, whichever is less.

### NANTICOKE CREEK

This stretch of Nanticoke Creek extends from its confluence with the Susquehanna River north to Caldwell East dam and travels through the following municipalities:

- Town of Lisle
- Town of Nanticoke
- Town of Maine
- Town of Union
- Village of Endicott

### Western Boundary

This boundary description begins at the intersection of Nanticoke Creek and NYS Route 17C in the Town of Union and proceeds north to the headwaters of the creek in the Town of Lisle.

Beginning at NYS Route 17C, the western extent of the WRA boundary is defined by the western edge of Glendale Road north to Carl Street. The boundary then follows the north side of Carl Street to NYS Route 26.

At the intersection of Carl Street and NYS Route 26, the western extent of the boundary proceeds north and is defined by the western edge of NYS Route 26 into the Hamlet of Maine. In the Hamlet of Maine, the boundary expands to the west of NYS Route 26 to include seven contiguous Town-owned parcels, including the Maine Memorial School and Maine Town Park.

At the intersection of NYS Route 26 and Nanticoke Road, the boundary proceeds north along the western edge of Nanticoke Road to the intersection of Henry M. Baldwin Street in the Town of Nanticoke. From this intersection, the boundary proceeds north along the western edge of Caldwell Hill Road. The western extent of the boundary continues along Caldwell Hill Road into the Town of Lisle to the Caldwell East dam.

At the Caldwell East dam, the boundary extends approximately 700 feet north of the dam along the western edge of Caldwell Hill Road and then travels east, perpendicular to Nanticoke Creek, and merges with the eastern extent of the WRA boundary along Nanticoke Creek.

### Eastern Boundary

This boundary description begins at approximately 700 feet to the north and 500 feet to the east of the Caldwell East dam and proceeds south along Nanticoke Creek.

From Caldwell East dam to Ames Road in the Town of Maine, the eastern extent of the WRA boundary is located 500 feet from the centerline of Nanticoke Creek. At Ames Road, the boundary continues south and is defined by the eastern edge of NYS Route 26 for approximately 3,000 feet. From this point to Pollard Hill Road, the eastern extent of the WRA boundary is located 500 feet from the centerline of Nanticoke Creek.

From Pollard Hill Road to Nanticoke Drive, the eastern extent of the WRA boundary is defined by the eastern edge of Edson Road. At the intersection of Edson Road and Nanticoke Drive, the boundary proceeds south following the northern and then eastern edge of Nanticoke Drive to the intersection of North Nanticoke Avenue.

From the intersection of Nanticoke Drive and North Nanticoke Avenue to June Street, the eastern extent of the boundary is defined by the eastern edge of North Nanticoke Drive. At June Street, the boundary proceeds west and south, following the southern edge of June Street to the three-point intersection of June Street, West Wendell Street, and Frey Avenue.

From this three-point intersection south to NYS Route 17C (West Main Street), the eastern extent of the WRA boundary is located 500 feet from the centerline of Nanticoke Creek. At NYS Route 17C, the WRA boundary along Nanticoke Creek merges with the northern portion of the WRA boundary along the lower Susquehanna River.

## SUSQUEHANNA RIVER IN EASTERN BROOME

This stretch of the Susquehanna River extends from the Pennsylvania state line north to the Chenango County line and travels through the following municipalities:

- Town of Windsor
- Town of Colesville
- Village of Windsor

### Western Boundary

This boundary description begins at the Pennsylvania state line in the Town of Windsor and proceeds north to the Chenango County line in the Town of Colesville.

Beginning at the Pennsylvania state line to the Village of Windsor boundary, the western extent of the WRA boundary follows NYS Route 79 and extends 500 feet west of the roadway centerline or is defined by the rear lot line of parcels fronting on the west side of NYS Route 79, whichever is less.

Where NYS Route 79 intersects the Village of Windsor boundary, the Village boundary defines the WRA until NYS Route 79 intersects the northern border of the Village.

From the Village of Windsor, the western extent of the WRA boundary continues north along NYS Route 79 and extends 500 feet west/north of the roadway centerline or is defined by the rear lot lines of parcels fronting on the western / northern side of NYS Route 79, whichever is less. At the intersection of Main Street and NYS Route 79 in the Hamlet of Harpursville, the western extent of the WRA is defined by the rear lot line of parcels fronting on the west side of Main Street.

At the intersection of Main Street and NYS Route 7, the WRA boundary follows NYS Route 7 north to the Chenango County line and is defined by the rear lot line of parcels fronting on the north side of NYS Route 7.

### Eastern Boundary

This boundary description begins at the Chenango County line in the Town of Colesville and proceeds south to the Pennsylvania state line in the Town of Windsor.

Beginning at the Chenango County border and continuing south to Mountain Road, the WRA boundary follows East Windsor Road and extends 500 feet east of the roadway centerline or is defined by the rear lot line of parcels fronting on the east side of East Windsor Road, whichever is less. At Mountain Road, the WRA boundary proceeds west and extends 500 feet south of Mountain Road or is defined by the rear lot line of parcels fronting on the south side of Mountain Road, whichever is less.

At the intersection of Mountain and Dutchtown Roads, the eastern extent of the WRA boundary proceeds south and extends 500 feet east of Dutchtown Road or is defined by the rear lot line of parcels fronting on the east side of Dutchtown Road, whichever is less. Where Dutchtown Road intersects Fordway Road, the boundary proceeds east to East Windsor Road and extends 500 feet north of Fordway Road or is defined by the rear lot lines of parcels fronting on the north side of Fordway Road, whichever is less.

## SECTION 1.1

# BOUNDARY DESCRIPTION (CONT.)

At East Windsor Road, the WRA boundary proceeds south until it intersects with the Village of Windsor and extends 500 feet east of East Windsor Road or is defined by the rear lot line of parcels fronting on the east side of East Windsor Road, whichever is less. The Village of Windsor defines the WRA boundary until Old Route 17 exits the village on the south side.

South of the Village of Windsor, the of the WRA boundary extends 500 feet east of Old Route 17 or is defined by the rear lot line of parcels fronting on the east side of Old Route 17, whichever is less. At the intersection of Old Route 17 and State Line Road, the boundary proceeds south along State Line Road to the Pennsylvania state line. The boundary extends 500 feet east of State Line Road or is defined by the rear lot line of parcels fronting on the east side of State Line Road, whichever is less.

### DELAWARE RIVER

This stretch of the Delaware River extends from the Pennsylvania state line north to the Village of Deposit and travels through the following municipalities:

- Town of Sanford
- Village of Deposit

### Western Boundary

This boundary description begins at the Pennsylvania state line in the Town of Sanford and proceeds north to the Delaware County line.

Beginning at the Pennsylvania state line and proceeding north, the WRA boundary follows Faulkener and then Sherman Creek Road and extends 500 feet south of the roadway centerline or is defined by the rear lot line of parcels fronting on the south side of Faulkener/Sherman Creek Road, whichever is less. At the intersection of Sherman Creek Road and River Road, the boundary proceeds north along River Road and

extends 500 feet west of the roadway centerline or is defined by the rear lot line of parcels fronting on the west side of River Road, whichever is less. Where River Road intersects the boundary of the Village of Deposit, the village boundary defines the WRA until it intersects with the Delaware County border.

### Eastern Boundary

The Delaware County line, following the Delaware River, defines the eastern boundary of the WRA from the Village of Deposit to the Pennsylvania state line.







## SECTION 2

# INVENTORY AND ANALYSIS

This Section includes a comprehensive inventory of existing resources, uses, and public infrastructure systems within the Waterfront Revitalization Area (WRA). This inventory provides an important foundation for understanding current conditions in the WRA, identifying needs and opportunities, and guiding the development of the projects proposed in Section 4. Topics covered in this Section include:

- Overview of the waterfront area
- Related plans and initiatives
- Socio-demographic characteristics
- Zoning and other local laws
- Existing land uses
- Brownfield sites
- Water-dependent uses
- Property ownership
- Natural resources
- Water resources
- Recreation and tourism
- Historical and cultural resources
- Scenic resources
- Infrastructure
- Transportation
- Key findings

When developing an LWRP, each municipality must conduct its own inventory and analysis. For a comprehensive overview of the key findings from each municipality's inventory and analysis, see Appendix A.

## SECTION 2.1

# OVERVIEW OF WATERFRONT AREA

### Total Area of the WRA:

42,670 acres

### Designated Inland Waterways:

Chenango River

Delaware River

Nanticoke Creek

Susquehanna River

Tioughnioga River

### Total Miles of Inland Waterway River Frontage:

186 miles

### Municipalities in the WRA:

City of Binghamton

Town of Barker

Town of Binghamton

Town of Chenango

Town of Conklin

Town of Colesville

Town of Dickinson

Town of Fenton

Town of Kirkwood

Town of Lisle

Town of Maine

Town of Nanticoke

Town of Sanford

Town of Triangle

Town of Union

Town of Vestal

Town of Windsor

Village of Deposit

Village of Endicott

Village of Johnson City

Village of Lisle

Village of Port Dickinson

Village of Whitney Point

Village of Windsor

The Waterfront Revitalization Area (WRA) encompasses a diverse mix of land uses, natural and cultural resources, and river frontage. This introductory section provides a brief overview of the WRA's history and future economic potential, setting the stage for this LWRS and the proposed projects in Section 4.

## REGIONAL CONTEXT

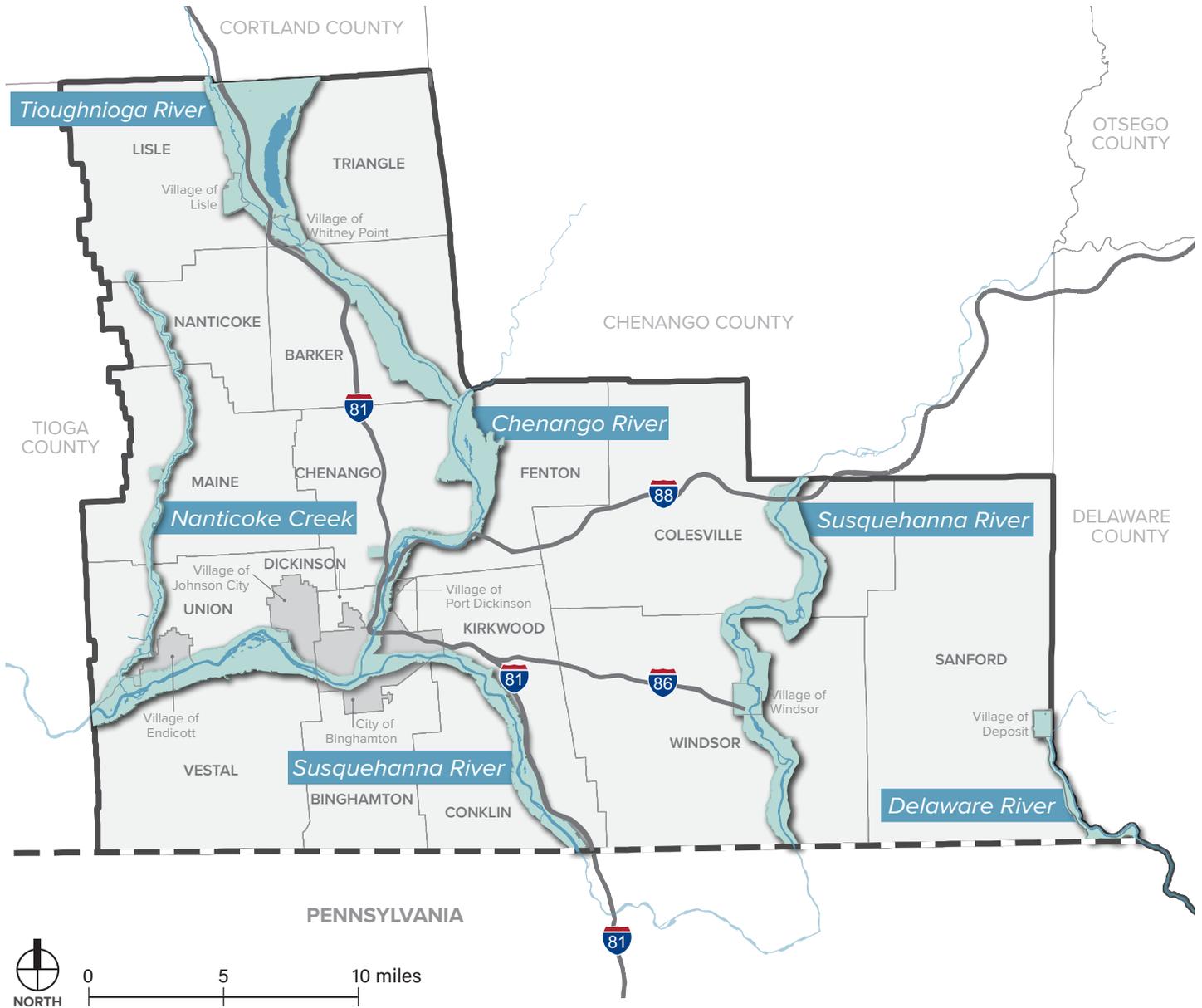
Broome County is located along the south border of New York State in a region known as the Southern Tier. The landscape consists of densely populated urban cores and associated suburban areas, surrounded by rural areas with rolling hills in the west and a more rugged landscape near the foothills of the Catskill Mountains. Due to the area's numerous streams and river valleys, the economy has historically been dependent on a traditional manufacturing economic base. The Southern Tier is today repositioning itself as a major gateway for advanced manufacturing, healthcare, culture and high-technology development, promoting Broome County's revitalized urban centers in Binghamton, Johnson City and Endicott as Innovation Districts. Broome County is comparative with the United States in median age (39.8), educational attainment (90.5%, high school graduate or higher), and homeownership (65.3%). The county is above the national average for poverty (23%, children under 18) and disabled population (15.6%).

## WATER RESOURCES SHAPE HISTORICAL DEVELOPMENT PATTERNS

There are two major watersheds located in Broome County: the Susquehanna and the Delaware. The Susquehanna is the largest river basin on the Atlantic Coast, with nearly 90% of the county draining towards it. Major tributaries in Broome County include the Chenango, Tioughnioga and Otselic Rivers. The Delaware River watershed is much smaller, along Broome's southeastern boundary. These rivers and streams were a natural attraction for the sawmills and gristmills that sprang up along the banks during the county's early development, which helped create stable and permanent food sources and enabled widespread settlement in Broome County. The lumber industry became the backbone of Broome County's economy in the nineteenth century. Natural waterways and the Chenango Canal, and later rail lines, provided a reliable transportation network enabling Broome County's industrial growth to flourish.

BOUNDARY: **WATERFRONT REVITALIZATION AREA (WRA)**

 Waterfront Revitalization Area



## SECTION 2.1

# OVERVIEW OF WATERFRONT AREA

By the later decades of the twentieth century, these manufacturing industries had either downsized, closed, or left the county. The total number of wage and salary jobs has declined significantly since 2000, a major factor in the decline in county population. The total number of employed has decreased from 83,003 in 2000 to 72,363 in 2010, a decline of 12.8%. The manufacturing sector of the county fell from a total of 17,289 in 2000 to 8,869 in 2010, a drop of nearly 50 percent. The county's rivers and riverfront are still considered the area's biggest strengths, but for different reasons now rather than industry.

For example, Nanticoke Creek is a recent addition to the NYS DOS Designated Inland Waterways list. It is one of a few creeks that have permanent easements purchased by the NYS Department of Environmental Conservation (DEC) from willing landowners that give anglers the right to fish and walk the bank. It is a NYS DEC Designated Trout Stream, stocked annually with brown trout. Parts of the Susquehanna River in Broome County are also classified by the NYS DEC as "Class A," indicating that its highest and best use is for water supply for human consumption. A significant portion of the City of Binghamton depends on the river for drinking water—about 20% of public water use in the county.

## ENVISIONING A FUTURE RIVERWAY ECONOMY

Broome County's intersecting system of waterways presents a tremendous opportunity to develop a river-based economy by connecting residents and visitors to the area's natural landscapes and water-based activities. The Broome County Intermunicipal Waterfront Public Access Plan (2011) was developed as a resource to guide future development activity along Broome County's riverfronts, focusing on a united vision for economic development, riverfront access and environmental stewardship. This plan builds on that effort and serves as a framework for waterfront revitalization planning efforts, with projects ranging from recreational use of the waterways, enhancing access to the riverfronts, protecting important natural resources, and promoting economic opportunities.

The Broome County LWRS expands upon the 2011 framework and affords a unique opportunity for residents and visitors to help determine how the county can fully become a destination for a vibrant riverfront economy, priding itself upon enhanced connectivity between water-dependent uses and recreational opportunities. This process will yield a unified waterfront vision to integrate a beautiful landscape and a reimagined economy, with opportunities for improved riverfront access and waterfront uses in a manner that preserves ecological benefits.

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## SECTION 2.2

# RELATED PLANS AND INITIATIVES

**The Broome County LWRS builds upon, expands, and updates the Intermunicipal Waterfront Public Access Plan completed by the County in 2011. This section provides a brief overview of other related planning efforts and initiatives, identifying key overlaps with the objectives of this LWRS.**

### COUNTY PLANS

The County has completed several recent planning processes and plans related to this LWRS. Relevant objectives and strategies identified in these plans are identified below and summarized in Table 2.2 Related Plans and Initiatives.

#### Comprehensive Plan Update (2021)

The County is currently updating its Comprehensive Plan. Several key principles have been identified, which align with and can be advanced through this LWRS, including:

- The community must be resilient to future environmental and economic changes, and
- Natural and cultural resources should be preserved and enhanced.

#### Agricultural Economic Development Plan (2019)

Broome County completed an Agricultural Economic Development Plan in 2019. This plan identifies priority lands for improving environmental quality and resiliency. Several of the high priority lands are located in the WRA along the upper Susquehanna River in the Towns of Colesville and Windsor. The plan also identifies several implementation actions relevant to this LWRS, including Goal 5, Action 2, which states, "Increase technical assistance programming with a focus on flood resiliency, stormwater management, and other environmental management issues."

#### Hazard Mitigation Plan (2019)

The County completed a hazard mitigation plan in 2019 to identify strategies to reduce the loss of life and property and lessen the impact of disasters. This plan developed an inventory of and risk assessment for county assets and also included hazard profiles for several different types of natural disasters, including floods and severe storms.

#### Natural Resources Inventory (2019)

Completed in 2019 by the Broome County Environmental Management Council, this plan inventories the county's unique and diverse natural resources. It also highlights the need for providing, expanding, and protecting outdoor recreational facilities and promoting responsible land use and development to ensure the county's natural resources continue to provide critical public services.

#### Parks Plan (2019)

This recently completed plan includes an inventory and assessment of the county's parks and includes targeted recommendations and strategies to improve recreational opportunities county-wide. Key recommendations include increased accessibility to and within all parks and protection of natural resources.

#### NY Rising Community Reconstruction Plan (2014)

Conducted in response to the storm damage and flooding caused by Hurricane Irene (August 2011) and Tropical Storm Lee (September 2011), community reconstruction plans were developed for the Town of Chenango and the Binghamton metropolitan area. The planning process included a robust asset inventory, risk assessment, and identified projects to increase resiliency throughout the county, with a particular focus on the City of Binghamton, Towns of Chenango, Conklin, Union, and Vestal, and the Villages of Endicott and Johnson City.

### Intermunicipal Waterfront Public Access Plan (2011)

This plan establishes a comprehensive vision for the future of Broome County's waterfront. It includes goals related to access, economic development, biodiversity, flood control, public health, connectivity, and multi-modal transportation, as well as proposed improvements to achieve these goals.

## REGIONAL PLANS

### Greater Binghamton Fund Strategic Investment Plan (2018)

The Southern Tier Regional Economic Development Council (REDC) identified "Building the Greater Binghamton Innovation Ecosystem" as one of the four priorities in their Upstate Revitalization Initiative Plan (see next section). In order to achieve their vision, the REDC established three Innovation Districts, or iDistricts, in the City of Binghamton, the Village of Endicott, and the Village of Johnson City. In 2017, Governor Cuomo created the Greater Binghamton Fund, providing a financial incentive program to implement transformative projects and to encourage public and private investment in Greater Binghamton's Innovation Districts. This strategic investment plan serves as a roadmap for the Greater Binghamton fund, identifying a suite of projects in all three iDistricts.

Several projects identified in the plan are located in or near the Broome County WRA, including:

- Johnson City Rail Trail;
- Gateway improvements at the intersection of Washington Avenue and E. Main Street in the Village of Endicott;
- Streetscape improvements on Washington Avenue in the Village of Endicott; and
- Minor water access enhancements encompassing the iDistrict(s) in the City of Binghamton.

### Southern Tier Upstate Revitalization Initiative Plan (2015)

This strategic revitalization plan was developed by the Southern Tier Regional Economic Development Council to identify transformative initiatives that build on the region's assets, create jobs, improve regional connectivity, reinvest in local communities, leverage private investment, attract talent, and position the region for long-term sustainability and growth. The Southern Tier was awarded \$500 million in New York State funds, allocated in \$100 million increments over the next five years, to implement this plan. The plan identified several catalytic projects, including the Route 434 Greenway Trail — a 2.5 mile multi-use path connecting the Town of Vestal and the City of Binghamton — and the creation of three iDistricts, both of which are located within or adjacent to the Broome County WRA.

### Susquehanna Heritage Area Management Plan Amendment (2009)

The Susquehanna Heritage Management Area Plan, which was amended in 2009, focuses on enhancing access, usage, and recreational opportunities along the historically and culturally significant Susquehanna and Chenango Rivers. The plan aims to promote the appreciation and preservation of the rivers' rich heritage while encouraging responsible use and enjoyment of these valuable resources.

### Binghamton Metropolitan Greenway Study (1999)

This Study identifies a greenway system of multi-use trails along the Susquehanna and Chenango Rivers in the Binghamton metropolitan area. This greenway master plan includes several trail alignment and facility recommendations within the Broome WRA, including:

- Town of Union Trails (~10 miles)
- Town of Vestal Trails (~10 miles)
- Vestal Parkway Trail (~3.5 miles)
- Otsiningo Park Trail network (~3 miles)
- Chenango Bridge Trail (~2 miles)
- Port Dickinson Park Trail (~ 10 miles)
- Schnurbusch Park Trail (~1.5 miles)
- Veterans River Park Trail (~1 mile)
- City of Binghamton Trails (~3.5 miles)

## SECTION 2.2

# RELATED PLANS AND INITIATIVES (CONT.)

TABLE 2.1: RELATED PLANS AND INITIATIVES

Plan Name	Plan Elements Related to the Broome County LWRS
<b>BROOME COUNTY</b>	
<b>Comprehensive Plan</b> (Update of 2013 Plan)	<ul style="list-style-type: none"> <li>Natural and cultural resources should be preserved and enhanced as a key priority.</li> </ul>
<b>Agricultural Economic Development Plan</b> (2019)	<ul style="list-style-type: none"> <li><b>Goal 5, Action 2:</b> Increase technical assistance programming with a focus on flood resiliency, stormwater management, and other environmental management issues.</li> </ul>
<b>Hazard Mitigation Plan</b> (2019)	<ul style="list-style-type: none"> <li><b>Goal 5:</b> Improve the resilience and strength of the built environment and communities to reduce impacts of natural hazard events.</li> </ul>
<b>Natural Resources Inventory</b> (2019)	<ul style="list-style-type: none"> <li><b>Objective 8:</b> Provide, expand and protect outdoor recreational facilities and opportunities.</li> <li><b>Objective 9:</b> Promote responsible land use and development, maintaining the capacity of our natural resources to provide services.</li> </ul>
<b>Parks Plan</b> (2019)	<ul style="list-style-type: none"> <li><b>Recommendation 5:</b> Enhance and Protect Environmental Resources.</li> <li><b>Recommendation 6:</b> Improve Accessibility in Our Parks.</li> </ul>
<b>NY Rising Community Reconstruction Plan</b> (2014)	<ul style="list-style-type: none"> <li><b>Recommended Project #6:</b> Expand flood protection of underdeveloped parcels to spur economic growth.</li> </ul>
<b>Intermunicipal Waterfront Public Access Plan</b> (2011)	<ul style="list-style-type: none"> <li><b>Goal 1, Access:</b> To improve public access to all riverfronts.</li> <li><b>Goal 2, Economic Development:</b> To stimulate economic revitalization in Broome County's riverfront communities.</li> <li><b>Goal 3, Community Health:</b> To enhance health and quality of life for all residents and visitors.</li> <li><b>Goal 4, Ecology and Environment:</b> To enhance the biodiversity of the region.</li> <li><b>Goal 5, Flood Control:</b> To sensitively reuse lands prone to flooding.</li> <li><b>Goal 6, Connectivity:</b> To connect communities through their riverfronts.</li> <li><b>Goal 7, Transportation:</b> To establish an intermodal transportation system that connects the riverfronts.</li> </ul>

TABLE 2.1: RELATED PLANS AND INITIATIVES (CONT.)

Plan Name	Plan Elements Related to the Broome County LWRS
<b>REGIONAL PLANS</b>	
<b>Greater Binghamton Fund Strategic Investment Plan</b> (2018)	<ul style="list-style-type: none"> <li>Recommends several trail and streetscape improvement projects to enhance local and regional connectivity in the Endicott, Johnson City, and Binghamton Innovation Districts (iDistricts).</li> </ul>
<b>Southern Tier Upstate Revitalization Initiative</b> (2015)	<ul style="list-style-type: none"> <li>Identifies transformative initiatives that build on the region's assets, improve regional connectivity, reinvest in communities, and position the region for long-term sustainability and growth.</li> </ul>
<b>Susquehanna Heritage Area Management Plan Amendment</b> (2009)	<ul style="list-style-type: none"> <li>Create enhanced access, usage, and recreational opportunities along the Susquehanna and Chenango Rivers.</li> </ul>
<b>Binghamton Metropolitan Greenway Study</b> (1999)	<ul style="list-style-type: none"> <li>Identifies a network of proposed trails along the Chenango and Susquehanna Rivers in the Binghamton metropolitan area to improve resident's quality of life, enhance local and regional connectivity, and bring people to the region's scenic waterways.</li> </ul>

## SECTION 2.3

# SOCIO-DEMOGRAPHIC CHARACTERISTICS

**This section provides an overview of the socio-demographic conditions and trends within the Waterfront Revitalization Area (WRA) and Broome County as a whole. Understanding the socio-demographic trends of a community establishes an important baseline for identifying community needs and informing recommendations for revitalization projects within the WRA.**

### DEMOGRAPHIC CHARACTERISTICS

The following demographic information was collected using ESRI Business Analyst. Data sources include the 2000 and 2010 US Census, the 2014-2018 American Community Survey, and ESRI-generated forecasts for 2020 and 2025.

All socio-economic data specific to the Broome County WRA in this section includes the Binghamton WRA (population, education, income, employment, and housing). Binghamton is a major center of housing, employment, and services in the county and including the City's WRA provides a more representative understanding of the county's waterfront as a whole.

#### Total Population

In 2020, approximately 195,300 residents lived in Broome County and approximately 34,500 residents lived within the WRA boundary. Since 2010 the population in Broome County has been steadily declining. Similarly, the population in the WRA has been declining at a steady rate since 2000. The total population in both the county and the WRA is projected to continue to decline over the next five years.

#### Population by Age

The age structure of the population is similar in the WRA and Broome County. Middle-aged residents (35 - 64 years old) account for the largest sector of the population. The WRA supports a slightly older population than the county as a whole, with approximately 23% of WRA residents over the age of 64 years old, compared to only 20% of county residents over the age of 64 years old.

Age trends across the county, from 2010 to 2019, exhibited minimal changes. Within this timeframe, the 55 and older age group experienced the greatest growth (5.2%), while the 35 to 54 year old age group experienced the largest decline (3.6%). These trends are projected to continue through 2025 and are expected to impact the amenities and services required by the county's changing population.

#### Population by Race

The population in both Broome County and the WRA is predominantly white. Compared to the county, the WRA has a slightly higher percentage of Black residents (7% of the total population, compared to 6% in the county), and a slightly lower percentage of Asian residents (3% of the total population, compared to 5% in the county).

### EDUCATION

Educational attainment in the WRA is generally similar to the county as a whole. In the WRA, approximately 38% of the population has received an associate's degree or higher. This rate is slightly less than the county as a whole, where approximately 42% of the population has received an associate's degree or higher. Approximately 10% of eligible WRA residents (9% of county residents) have not completed high school or a high school equivalent.

## TOTAL POPULATION

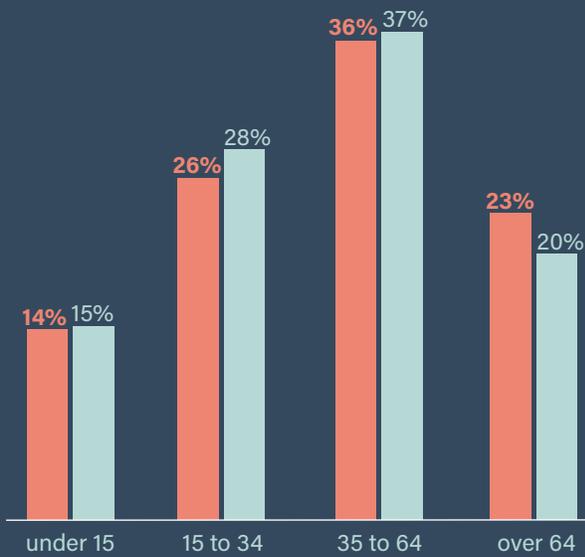
- WRA Population
- Broome County Population



## POPULATION BY AGE (2020)

percent of total population

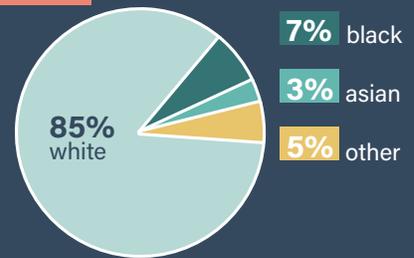
- WRA
- Broome County



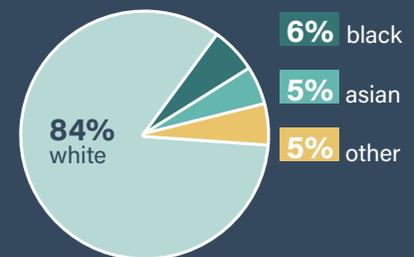
## POPULATION BY RACE (2020)

percent of total population

WRA



Broome County



Data Source For All Graphics: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2020 and 2025.

## SECTION 2.3

# SOCIO-DEMOGRAPHIC CHARACTERISTICS (CONT.)

### INCOME

Income indicators are consistently lower in the WRA than Broome County and New York State. Per capita income in the WRA is \$25,500, which is almost slightly less than per capita income in the county as a whole (\$28,100). The median and average household incomes in the WRA are \$43,400 and \$58,400, respectively. Comparatively, median and average incomes in the county are higher (\$51,700 and \$68,000, respectively).

### EMPLOYMENT

In 2020, 12.7% of the population aged 16 and older was unemployed in the WRA. This relatively high unemployment rate is similar to the county unemployment rate (12.4%), and reflects the economic distress caused globally by the COVID-19 pandemic. Prior to the pandemic, unemployment rates, based on American Community Survey 5-Year Estimates, in Broome County were much lower:

- 2019 unemployment rate in Broome County was 6.2%
- 2018 unemployment rate in Broome County was 6.6%
- 2017 unemployment rate in Broome County was 7.2%
- 2016 unemployment rate in Broome County was 7.4%

A majority of the population in the WRA and the county work in the services industry (55% in both geographies). The retail trade and manufacturing industries also employ relatively high portions of the population in the WRA (11% and 10.2%, respectively). In both the county and the WRA, the agricultural/mining industries employ the smallest proportion of the population.

#### EMPLOYED POPULATION BY INDUSTRY (2020)

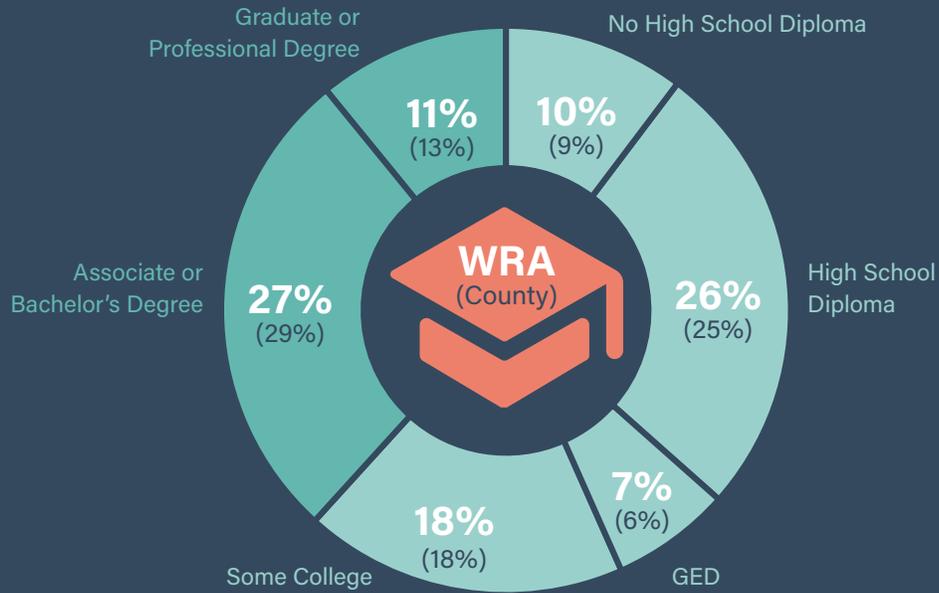
civilian population ages 16 and over

INDUSTRY	WRA	BROOME COUNTY
Agriculture/Mining	0.7%	0.6%
Construction	5.3%	5.9%
Manufacturing	10.2%	9.9%
Wholesale Trade	3.1%	2.5%
Retail Trade	11.0%	10.7%
Transportation/Utilities	3.8%	4.8%
Information	2.1%	1.5%
Finance/Insurance/Real Estate	4.5%	4.8%
Services	55.0%	55.0%
Public Administration	4.3%	4.4%

*Data Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2020 and 2025.*

## EDUCATIONAL ATTAINMENT (2020)

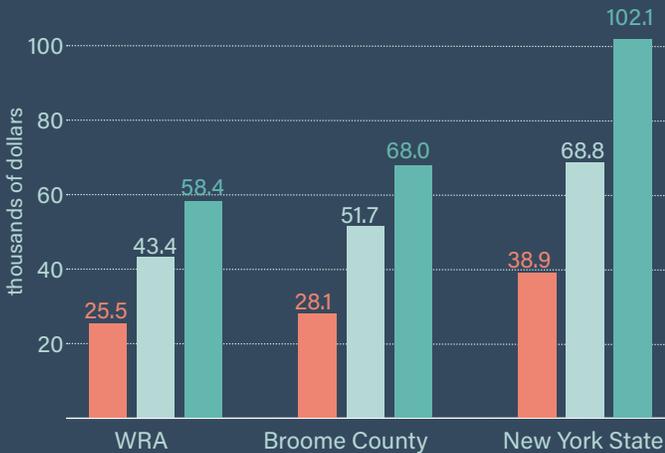
percent of total population aged 25+



## INCOME (2020)

thousands of dollars

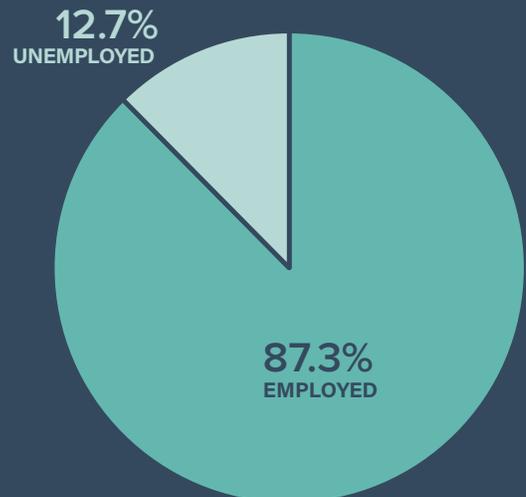
- per capita income
- median household income
- avg. household income



## WRA EMPLOYMENT RATE (2020)

employed population aged 16+

Broome County unemployment rate is 12.4%



Data Source For All Graphics: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2020 and 2025.

## SECTION 2.3

# SOCIO-DEMOGRAPHIC CHARACTERISTICS (CONT.)

### HOUSING

In 2020, there were approximately 14,900 households in the WRA and the average household size was 2.2. Comparatively, in Broome County in 2020, there were as total of approximately 80,000 households with an average housld size of 2.3.

Owner-occupied housing units are slightly lower (46%) and renter-occupied housing units are slightly higher (41%) in the WRA compared to Broome County (53% owner-occupied; 35% renter-occupied). The percentage of vacant housing units in the WRA (12.5%) is similar to the vacancy rate in the county (11.5%).

The median home value in the WRA is approximately \$110,000, which is slightly lower than the median home value in Broome County (approximately \$125,000).

### SOCIALLY VULNERABLE POPULATIONS

As a whole, the population in the WRA is more vulnerable to the potential impacts of flooding and severe weather events not only due to their proximity to dynamic waterways, but also in terms of social and economic indicators compared to the county as a whole.

- 34% of households in the WRA have one or more people living with a disability compared to 30% of households in the county;
- 17% of households in the WRA do not own a vehicle and a majority of these households are renter-owned (2,187 households with no access to a car are renter-occupied, while only 329 households with no access to a car are owner-occupied) compared to 12% of households in the county without access to a car; and,
- 21% of households in the WRA are below the poverty level compared to 16% of households in the county.

### Potential Environmental Justice Areas

Potential environmental justice are U.S. Census block groups of 250 to 500 household where populations meet or exceed the following statistical thresholds (according to 2014-2018 American Community Survey data):

- At least 52.42% of the population in a urban area reported themselves as members of minority groups; or
- At least 26.28% of the population in a rural area reported themselves as members of minority groups; or
- At least 22.82% of the population in an urban or rural area had household incomes below the federal poverty level.

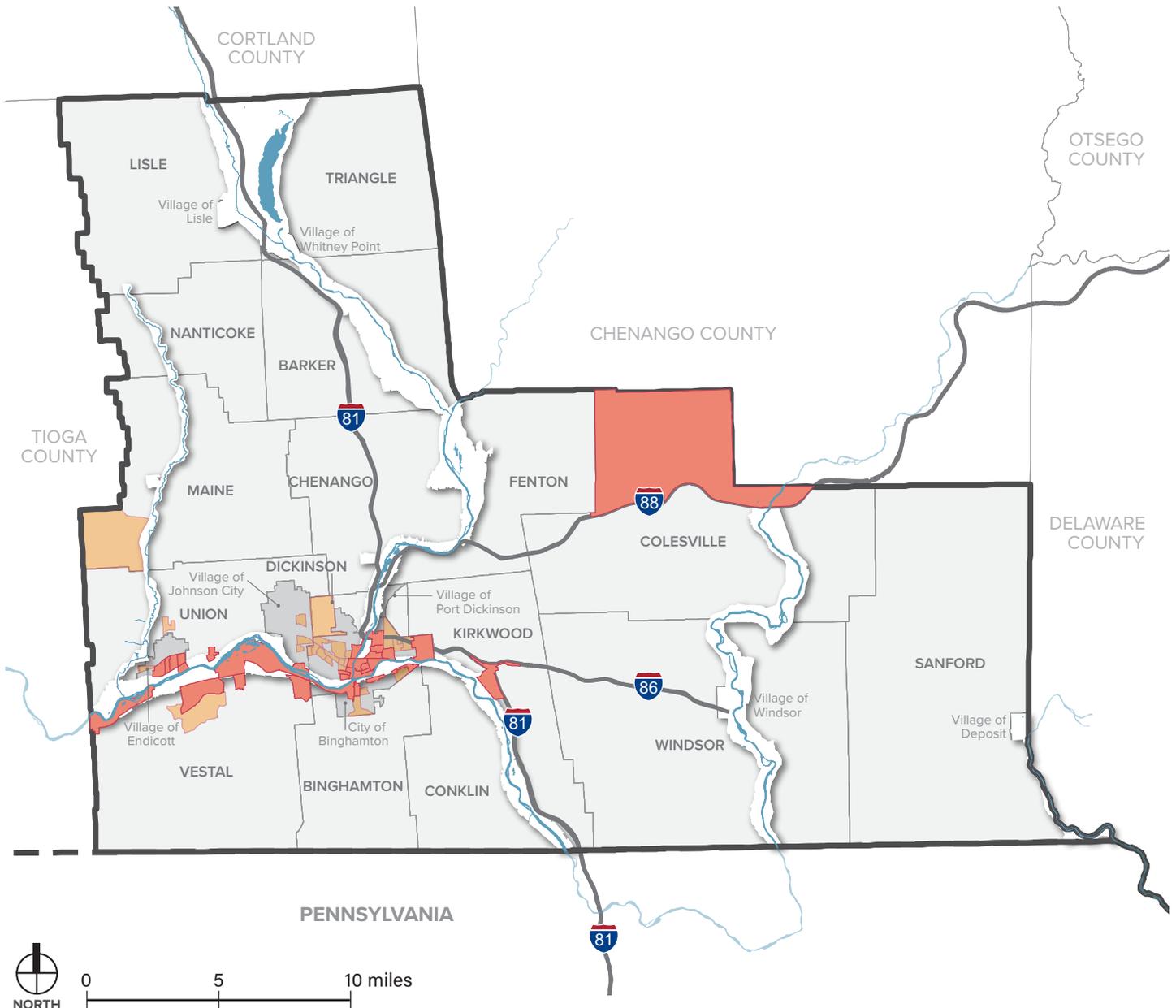
Fifteen potential environmental justice areas, as identified by the NYS DEC, overlap with the WRA. A majority (13) of these areas are urban and located along the lower Susquehanna River in the Towns of Vestal and Union and the Village of Endicott. Two of the potential environmental justice areas are classified as rural and are located in the Towns of Colesville and Kirkwood.

The highest concentration of poverty occurs in the Village of Endicott, Town of Union (immediately adjacent to western border of Binghamton), and Town of Vestal (immediately adjacent to western border of Binghamton), where over 30% of households fall below the federal poverty level. The highest reported minority rate (63%) occurs in a block group in the Town of Vestal, between Jensen Road and Rano Boulevard, just south of the Vestal Parkway.

Several potential environmental justice areas also include the City of Binghamton and areas located adjacent to the WRA including the Towns of Vestal and Maine, and the Village of Johnson City.

SOCIO-DEMOGRAPHICS: **POTENTIAL ENVIRONMENTAL JUSTICE AREAS (2020)**

- Potential Environmental Justice Areas in WRA
- Potential Environmental Justice Areas Outside of the WRA
- Waterfront Revitalization Area



Data Source: NYS Department of Environmental Conservation

## SECTION 2.4

# ZONING AND OTHER LOCAL LAWS

### ZONING LAWS

All municipalities in Broome County have zoning, or some type of Land Use Management Local Law, with the exception to the Towns of Lisle and Triangle and Village of Lisle. The Towns of Barker, Lisle and Triangle and Villages of Endicott, Lisle, Whitney Point, and Windsor do not have subdivision regulations. Site plan review, whether incorporated into zoning or as a standalone law, is not present in the code of regulations for the Villages of Lisle and Windsor and the Towns of Barker, Colesville, Dickinson, Fenton, Lisle, Nanticoke, Triangle, and Windsor.

A majority of land area in the Broome County WRA is zoned for agricultural uses (48%). Approximately 18% of land area in the WRA is zoned for residential uses, 7% is zoned for industrial uses, 6% for commercial uses, and only 2% is zoned for open space or recreational uses. Approximately 18% of the land area in the WRA does not have any zoning district assigned.

The table below summarizes zoning in the Broome County WRA and for comparison also includes zoning in the City of Binghamton's WRA.

TABLE 2.2: SUMMARY OF ZONING IN THE BROOME COUNTY AND BINGHAMTON WRAs

ZONING	BROOME COUNTY (% of total area in the County's WRA)	CITY OF BINGHAMTON (% of total area in the City's WRA)
Agriculture	48%	0%
Commercial	6%	18%
Floodplain Management	<1%	0%
Industrial	7%	8%
Mixed-Use	<1%	18%
Mobile Home	<1%	0%
None	18%	0%
Open Space / Recreation	2%	<1%
Planned Unit Development	1%	0%
Residential	18%	56%

TABLE 2.3: LOCAL LAWS REGULATING LAND USE IN EACH MUNICIPALITY

	ZONING	SITE PLAN REVIEW	SUBDIVISION REVIEW	OVERLAY DISTRICTS	STORMWATER MANAGEMENT	EROSION CONTROL	FLOOD RISK PREVENTION	SURFACE WATER PROTECTION	ENVIRONMENTAL QUALITY REVIEW	HISTORIC PRESERVATION	NATURAL AREA PROTECTION	RENEWABLE ENERGY GOALS	OTHER
City of Binghamton	●	●	●		●	●	●			●			●
Village of Deposit							●		●				
Village of Endicott	●	●		●	●	●	●		●	●	●		
Village of Johnson City	●	●	●	●	●	●	●	●	●	●	●		●
Village of Lisle													
Village of Port Dickinson	●	●	●						●				●
Village of Whitney Point	●						●						
Village of Windsor	●						●		●		●		
Town of Barker	●						●						
Town of Binghamton	●	●	●		●		●		●			●	●
Town of Chenango	●		●		●	●	●		●			●	●
Town of Conklin	●	●	●		●	●	●	●				●	
Town of Colesville	●	●	●				●					●	
Town of Dickinson	●		●		●	●	●			●		●	
Town of Fenton	●		●		●		●	●			●		●
Town of Kirkwood	●	●	●		●	●	●						●
Town of Lisle							●						
Town of Maine	●	●	●				●						
Town of Nanticoke			●				●						●
Town of Sanford			●				●						●
Town of Triangle							●						
Town of Union	●	●	●			●	●	●	●		●		●
Town of Vestal	●	●	●	●			●		●	●			●
Town of Windsor	●		●	●			●		●				

## SECTION 2.4

# ZONING AND OTHER LOCAL LAWS (CONT.)

### LOCAL ENVIRONMENTAL LAWS

In addition to land use regulations, some municipalities have implemented local environmental review laws, which allow municipalities to adopt their own lists of Type I and Type II actions in addition to the State Type I or Type II lists. Local environmental review also allows the designation of a specific geographic area as a Critical Environmental Area (CEA). Following designation, the potential impact of an action on the environmental characteristics of the CEA must be evaluated in determining the significance of a Type I or an Unlisted action. Municipalities with some form of local environmental review law include the:

- Village of Endicott
- Village of Johnson City
- Village of Port Dickinson
- Village of Windsor
- Town of Chenango
- Town of Union
- Town of Vestal
- Town of Windsor
- City of Binghamton

The Villages of Deposit, Endicott, and Johnson City and the Towns of Fenton and Union also have aquifer and watershed protection districts, which prohibit potentially polluting land uses in recharge areas, watersheds and near surface waters.

For a summary of the different types of local laws enacted in each municipality, please see Table 2.4 on page 39.

### LAND USE REGULATION TOOLS IN NEW YORK STATE

The three most common techniques for the regulation of local land use in New York State are zoning, site plan review, and subdivision regulations.

- 1. ZONING.** Zoning commonly consists of two components: a zoning map and a set of zoning regulations. Zoning regulations describe permitted land uses in each of the various zoning districts identified on the zoning map. They also include dimensional standards for each district, such as the height of buildings, minimum setbacks from buildings to property lines, and the density of development. These are referred to as “area” standards. The type of use, and/or the zoning district, designates “use” standards such as high-, medium- or low- density residential, general commercial, highway commercial, light industrial, and heavy industrial.
- 2. SITE PLAN REVIEW.** Site plan review is concerned with how a parcel is developed. A site plan shows the arrangement, layout, and design of the proposed use of a single parcel of land. Site plan review can be incorporated into a local zoning law or ordinance, or instead be adopted as a separate local law or ordinance.
- 3. SUBDIVISION.** The subdivision process controls how land is divided into smaller units, which are usually individual building lots. Subdivision regulations typically ensures that when development occurs, streets, lots, open space and infrastructure are adequately designed, and the municipality’s land use objectives are met.



## SECTION 2.5

# EXISTING LAND USES

**The WRA supports a diversity of land uses, which define local character areas and guide future development patterns. Understanding the composition and distribution of existing land uses in the WRA helps to identify opportunities for future economic development, landscape and natural resource preservation, and improved connections between the rivers and adjacent land uses.**

### LAND USE IN THE WRA

Land use in the WRA and Broome County was mapped based on the New York State property classification code assigned to each parcel. Below is an overview of the different types of land uses that occur within the WRA.

#### Agricultural

Thirteen (13) percent of the total land area within the WRA is comprised of agricultural uses. These uses are concentrated along the Upper Susquehanna River in the Towns of Colesville and Windsor. There is also a relatively high concentration of agricultural uses along the upper reaches of the Chenango River and Nanticoke Creek and along the Tioughnioga River. Compared to Broome County, where agricultural uses comprise 7% of the total land area, agricultural uses in the WRA are more prominent.

#### Commercial / Mixed-Use

Commercial and mixed-use land uses are concentrated in the urbanized areas along the lower Susquehanna and Chenango Rivers, adjacent to the City of Binghamton. Within the WRA, commercial and mixed-use land uses comprise approximately 6% of the total land area, which is relatively high compared to Broome County as a whole, where commercial and mixed-uses only comprise about 1% of the total land area.

#### Community & Public Services

Community and public services include important public assets, such as educational and government institutions, libraries, cultural and recreational facilities, cemeteries, and public infrastructure systems (e.g., flood control, water supply, roadways, etc.). The concentration of community and public service uses is slightly higher in the WRA than the County as a whole. Approximately 4% of the total land area in the WRA is comprised of public or community service uses, while only 1% of the total land area in the County is comprised of these uses. These uses are predominantly concentrated along the urbanized portions of the lower Susquehanna River.

#### Industrial and Mining

The County's industrial and mining uses are concentrated within the WRA, given the presence of the rivers which provide important transportation, energy, water supply and disposal, and sand and gravel resources. Approximately 1% of the total land area in the WRA is comprised of industrial and mining uses, while less than 1% of the total land area in the County is comprised of these uses. Within the WRA, these uses are predominantly concentrated along the lower reaches of the Susquehanna and Chenango Rivers, in the urbanized areas adjacent to the City of Binghamton.

#### Recreation and Wild/Forest

Recreational and wild/forest land uses include athletic fields, pools, entertainment uses (e.g., movie theaters), public parks, forests, and conservation lands. Approximately 2% of the total land area in the WRA is comprised of recreational and wild/forest uses, which is the same county-wide. Recreational uses are concentrated in urbanized areas, while small patches of wild/forest uses are distributed throughout the WRA.

EXISTING LAND USES: LAND USE IN THE WRA

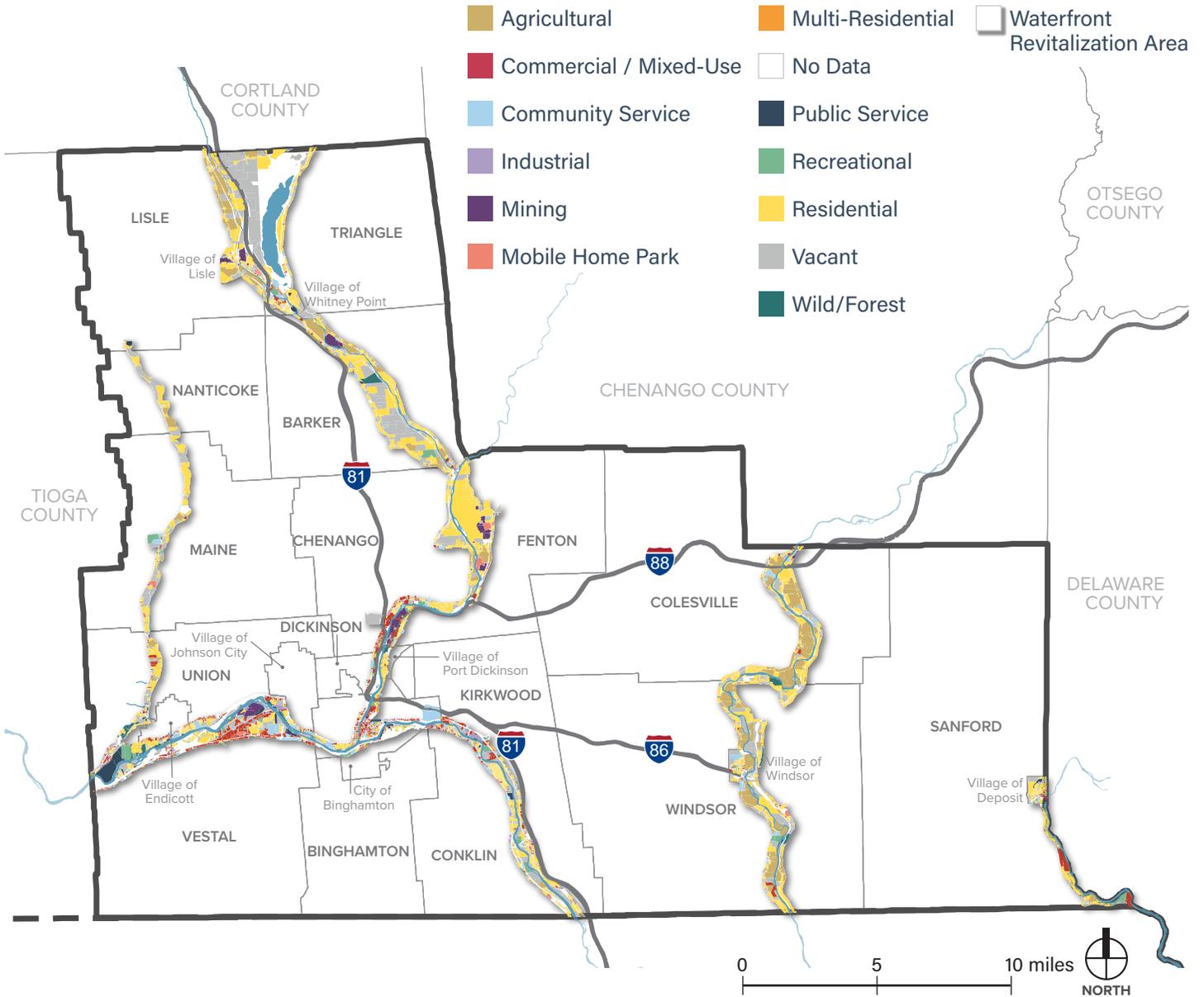


TABLE 2.4: PERCENT LAND USE COVER IN THE WRA COMPARED TO BROOME COUNTY

	Agricultural	Commercial / Mixed-Use	Community Services	Industrial	Mining	Mobile Home Park	Multi-Residential	No Data	Public Services	Recreational	Residential	Vacant	Wild/Forest
<b>WRA</b> total area: 32,247 acres	13%	6%	4%	1%	2%	1%	<1%	2%	2%	2%	37%	28%	1%
<b>Broome County</b> total area: 429,109 acres	7%	1%	1%	<1%	<1%	<1%	<1%	1%	1%	2%	44%	36%	5%

## SECTION 2.5

# EXISTING LAND USES (CONT.)

### Residential

Residential uses include single- and multi-family. Single-family homes are distributed throughout the WRA and comprise approximately 37% of the total land area in the WRA. Multi-family residential uses are uncommon in both the WRA and in Broome County as a whole; these uses comprise less than 1% of the total land area in both the WRA and Broome County.

### Vacant

Vacant land, as defined by New York State Department of Taxation and Finance, account for approximately 28% of the total land area in the WRA. Vacant parcels are present throughout the WRA; however, they are concentrated in more rural areas where parcel sizes are larger. Within Broome County as a whole, approximately 36% of the total land area is comprised of vacant land.

### AGRICULTURE

The agricultural and horticultural industry supports businesses in every municipality within Broome County, and direct sales of local products generate approximately \$30.7 million annually. This industry directly employs approximately 900 people and has been diversifying in recent years. While the presence of traditional dairy farms has been decreasing, the county is experiencing an increase in farms producing vegetables, fruits, meat and poultry, fiber and timber products, maple syrup, and other specialty items.

Agricultural uses comprise approximately 14% of the total land area in the WRA, which is a higher rate than the County as a whole (at the County level, agricultural uses only comprise 7% of the total land area).

There are two primary clusters of farmland in Broome County, and similarly, the WRA. The first cluster is located in the northern portion of the WRA, along the Tioughnioga River and the

upper reaches of the Chenango River. More broadly, the northern portion of Broome County is characterized by rolling hills and features larger, more contiguous farm fields than other parts of the county where slopes are steeper.

The second cluster of farmland in the WRA is located in the Towns of Colesville and Windsor, along the Upper Susquehanna River. Although topography is generally steeper in this portion of the county compared to the north, the floodplains of the Susquehanna River are characterized by rich agricultural soils and support prime farmland.

### Agricultural Districts

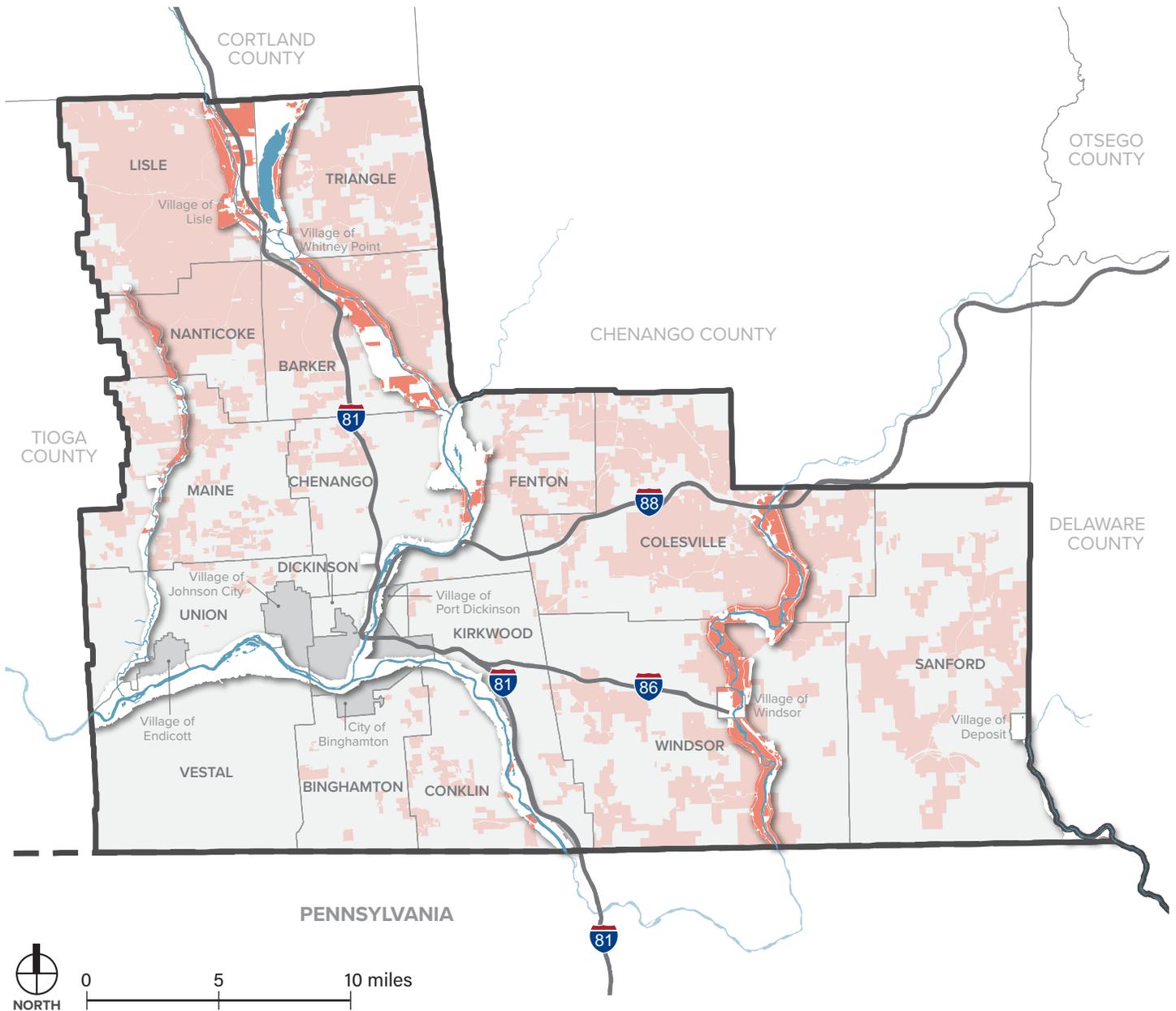
Approximately 25% of the land in the WRA is located in an agricultural district. Within the WRA, agricultural districts are located in the more rural towns of Lisle, Triangle, Barker, Fenton, Chenango, Nanticoke, Maine, Conklin, Colesville, Kirkwood, Windsor, and Sanford.

Agricultural districts protect and promote the availability of farmland. This voluntary program was established by New York State law (Article 25-AA of the Agriculture & Markets Law) is administered at the county-level. Enrollment in the agricultural district program is open to eligible landowners and offers several advantages, including:

- Partial property tax relief through agricultural use-value assessment and special benefit assessments;
- Protection from overly restrictive local laws that limit farm operations; and,
- Access to funding for acquisition and construction projects.

EXISTING LAND USES: **AGRICULTURAL DISTRICTS (2011)**

- Agricultural Districts in the WRA
- Agricultural Districts Outside of the WRA
- Waterfront Revitalization Area



**Data Source:** Cornell Institute for Resource Information Sciences (Cornell IRIS) and NYS Department of Agriculture and Markets

## SECTION 2.5

# EXISTING LAND USES (CONT.)

### LAND USE IN THE WRA BY SUB-BASIN

The distribution and composition of land uses within a watershed directly impacts the water quality and hydrological function of receiving water bodies. Therefore, land use has also been mapped and analyzed at the sub-basin level to provide a better understanding of the relationship between land use and the receiving waterways that define the WRA.

The charts and maps on the following pages are organized by sub-basin and illustrate the distribution of land uses within the towns and villages that comprise the WRA. In instances where a municipality spans more than one sub-basin, the municipality was assigned to the sub-basin containing the majority of the municipality's acreage.

#### Owego-Wappasening Sub-Basin

The predominant land uses in this sub-basin are residential and vacant. This sub-basin also supports the greatest amount of wild/forest land use.

The Towns of Maine and Nanticoke are predominately comprised of single-family residential, vacant, and agricultural uses. The other municipalities within this sub-basin support a greater diversity of land uses, including commercial, public service, industrial, residential, recreational, and vacant uses. In particular, the land use mix in the Village of Endicott includes a large proportion of public services due to the presence of the Tri-Cities airport and the Village's wastewater treatment plant. The Town of Vestal supports a relatively high concentration of commercial uses, which are concentrated along the Vestal Parkway corridor.

#### Upper Susquehanna Sub-Basin

This sub-basin is characterized by a diverse mix of land uses, including high concentrations of commercial uses, in the areas surrounding the City of Binghamton and a high concentration of agricultural uses along the upper Susquehanna River in Colesville and Windsor. Residential and vacant land comprise the greatest amount of area in this sub-basin.

#### Chenango Sub-Basin

Similar to the other sub-basins, residential and vacant land uses comprise a majority of the land area in this sub-basin. This sub-basin supports the greatest amount of mining uses (approximately 525 acres). In Fenton, nearly 300 acres are used for mining operations associated with the floodplain of the Chenango River.

#### Delaware Sub-Basin

Residential uses cover the most land area in this sub-basin. Commercial uses are concentrated in the Village of Deposit, as well as along the West Branch of the Delaware River where businesses cater to the tourism industry (e.g., anglers, resorts).



Main Street in the Village of Windsor (image credit: Bergmann)

## SECTION 2.5

## EXISTING LAND USES (CONT.)

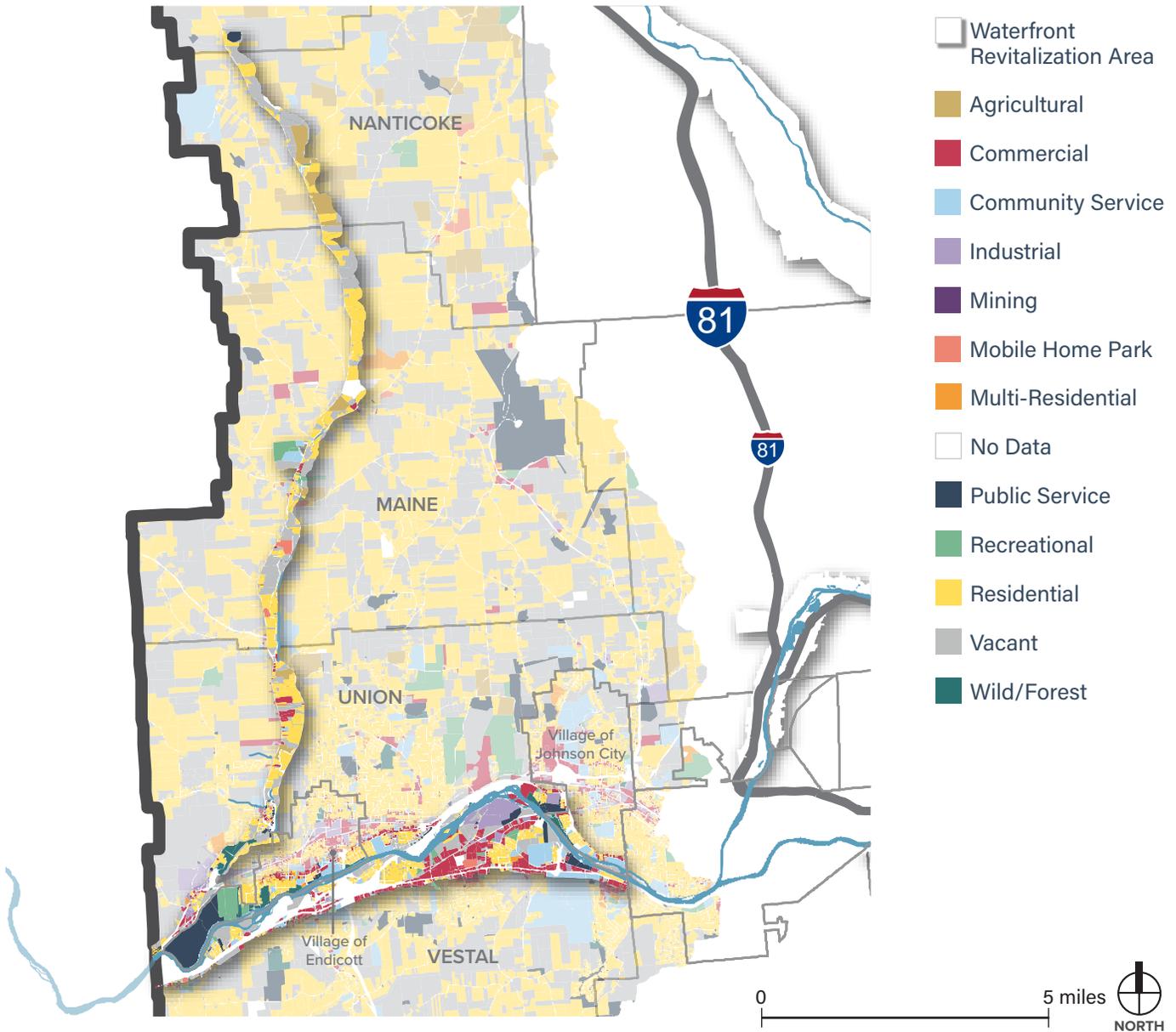
TABLE 2.5: LAND USES IN OWEGO-WAPPASENING SUB-BASIN

	Town of Nanticoke total area in WRA: 602 acres		Town of Maine total area in WRA: 1,383 acres		Town of Union total area in WRA: 1,722 acres		Town of Vestal total area in WRA: 2,139 acres		Vill. of Endicott total area in WRA: 838 acres		Vill. of Johnson City total area in WRA: 191 acres	
	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)
<b>Agricultural</b>	3	17% (103.6)	2	3% (48.1)	3	3% (56.4)	-	-	-	-	-	-
<b>Commercial</b>	-	-	11	1% (16.8)	184	11% (182.7)	324	29% (621)	117	5% (41)	31	10% (18.9)
<b>Community Services</b>	4	1% (6.4)	8	3% (48.4)	23	3% (54.4)	34	10% (222)	25	7% (59.9)	5	21% (39.4)
<b>Mining</b>	-	-	-	-	-	-	3	8% (160)	-	-	-	-
<b>Industrial</b>	-	-	-	-	19	4% (65.6)	10	2% (41.4)	2	<1% (0.6)	1	17% (32.8)
<b>Mobile Home Park</b>	-	-	2	3% (44)	-	-	2	1% (25.3)	-	-	-	-
<b>Multi-Residential</b>	-	-	3	<1% (0.45)	20	<1% (6.0)	11	1% (13.4)	67	2% (23)	3	<1% (0.3)
<b>No Data</b>	-	-	3	4% (56.1)	10	1% (22.8)	17	1% (30.1)	3	<1% (0.4)	2	<1% (0.1)
<b>Public Services</b>	-	-	1	<1% (0.3)	47	15% (250.0)	27	4% (90.8)	12	40% (335.3)	1	1% (1.9)
<b>Recreational</b>	-	-	4	5% (75.38)	2	1% (14.0)	14	3% (57.7)	4	16% (131)	-	-
<b>Residential</b>	44	40% (239.5)	171	43% (597.9)	1,289	32% (550.4)	1,101	18% (392.4)	845	17% (142.6)	394	28% (54.2)
<b>Vacant</b>	24	42% (252.7)	96	36% (496)	538	23% (402.3)	353	23% (484.8)	63	4% (31)	29	12% (22.5)
<b>Wild/Forest</b>	-	-	-	-	12	7% (117)	-	-	10	9% (73.3)	2	11% (21)

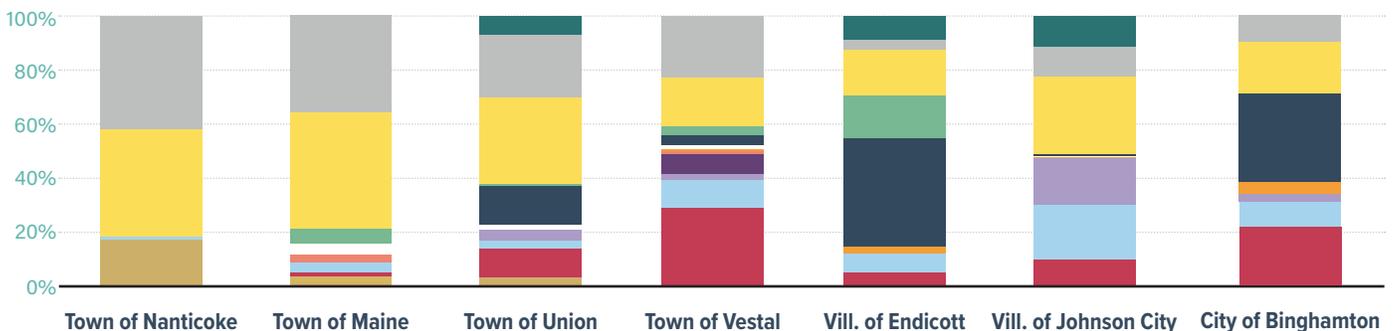
land use exceeds 20% of municipality's total land area in the WRA

Note: Land use percentages within the city of Binghamton are not included in this chart. See the following page for a breakdown of land use percentages for the city of Binghamton.

EXISTING LAND USES: **LAND USE IN THE OWEGO-WAPPASENING SUB-BASIN**



**PERCENT LAND USE COVER BY MUNICIPALITY IN THE WRA** (SEE MAP LEGEND FOR COLOR KEY)



## SECTION 2.5

## EXISTING LAND USES (CONT.)

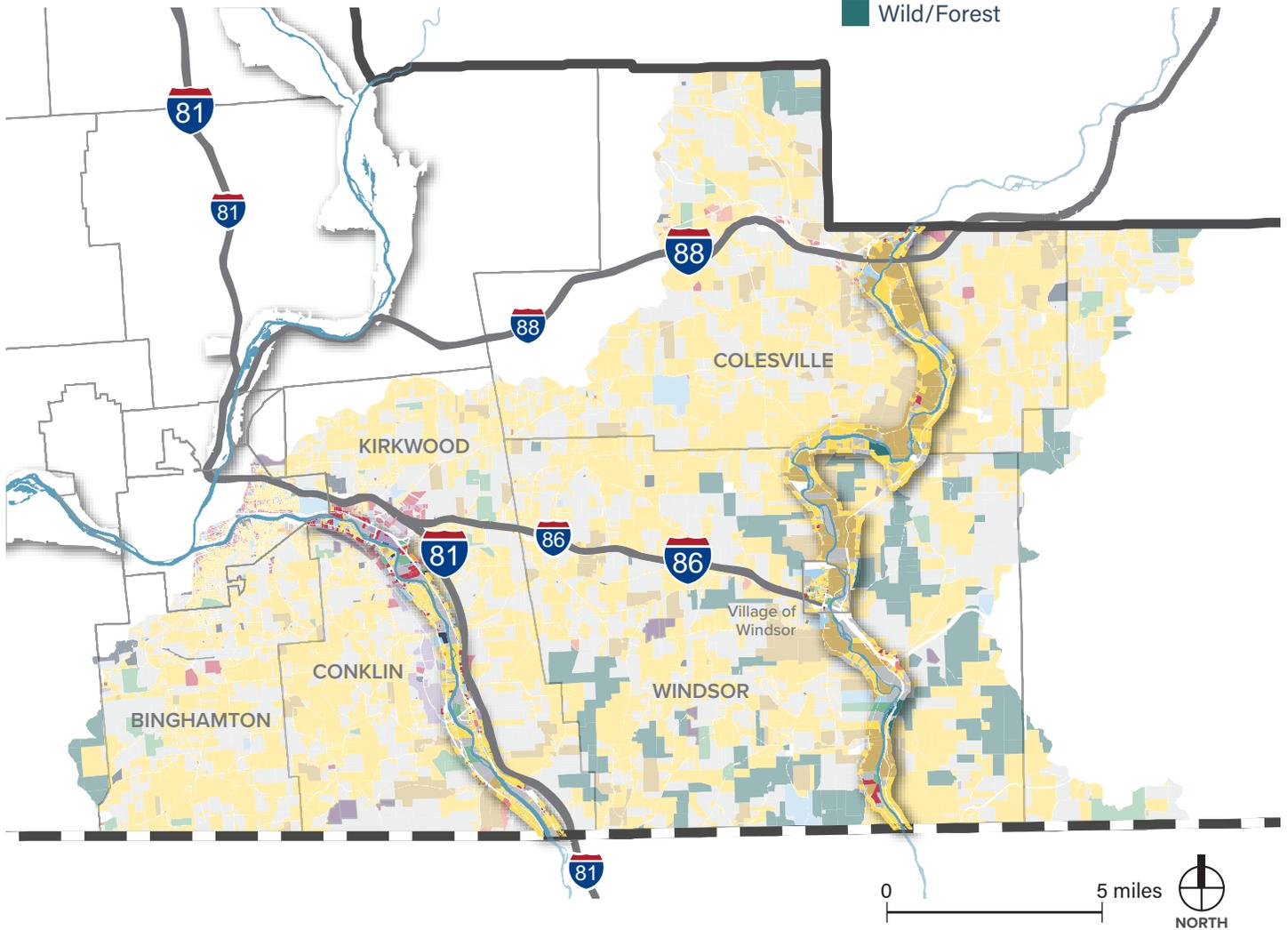
TABLE 2.6: LAND USES IN UPPER SUSQUEHANNA SUB-BASIN

	Town of Binghamton total area in WRA: 0.2 acres		Town of Conklin total area in WRA: 1,255 acres		Town of Colesville total area in WRA: 2,841 acres		Town of Kirkwood total area in WRA: 1,252 acres		Town of Windsor total area in WRA: 4,245 acres		Vill. of Windsor total area in WRA: 685 acres	
	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)
<b>Agricultural</b>	-	-	5	4% (48.1)	31	45% (1,289)	-	-	40	33% (1,413)	4	25% (168.7)
<b>Commercial</b>	-	-	85	7% (81.9)	20	1% (28.5)	78	13% (164.4)	10	2% (64)	23	2% (11.7)
<b>Community Services</b>	-	-	22	6% (76.9)	29	3% (54.4)	12	1% (18)	13	2% (63.3)	18	14% (93.2)
<b>Mining</b>	-	-	-	-	1	<1% (13)	-	-	-	-	-	-
<b>Industrial</b>	-	-	7	3% (30.8)	-	-	12	7% (84.2)	-	-	1	<1% (2.9)
<b>Mobile Home Park</b>	-	-	2	1% (12.4)	1	<1% (3.5)	2	1% (7.7)	2	<1% (17.4)	-	-
<b>Multi-Residential</b>	-	-	5	<1% (3.5)	2	<1% (1.0)	4	1% (11.5)	4	<1% (10.6)	9	1% (7.6)
<b>No Data</b>	-	-	4	5% (57.8)	3	<1% (1.0)	4	1% (10.4)	7	2% (94.3)	5	3% (19.7)
<b>Public Services</b>	-	-	9	2% (29)	4	<1% (2.3)	7	1% (6.9)	-	-	2	<1% (1.5)
<b>Recreational</b>	-	-	5	4% (49.8)	1	<1% (1.5)	7	6% (72.8)	4	2% (63.6)	4	1% (7.8)
<b>Residential</b>	2	5% (0.01)	732	40% (495.9)	379	37% (1,045.2)	345	32% (400)	392	31% (1,332.9)	273	26% (176.1)
<b>Vacant</b>	1	95% (0.2)	363	29% (367.9)	86	13% (363.9)	187	38% (470)	229	25% (1,065.2)	72	29% (195.7)
<b>Wild/Forest</b>	-	-	-	-	5	<1% (1.9)	1	<1% (5.5)	-	-	-	-

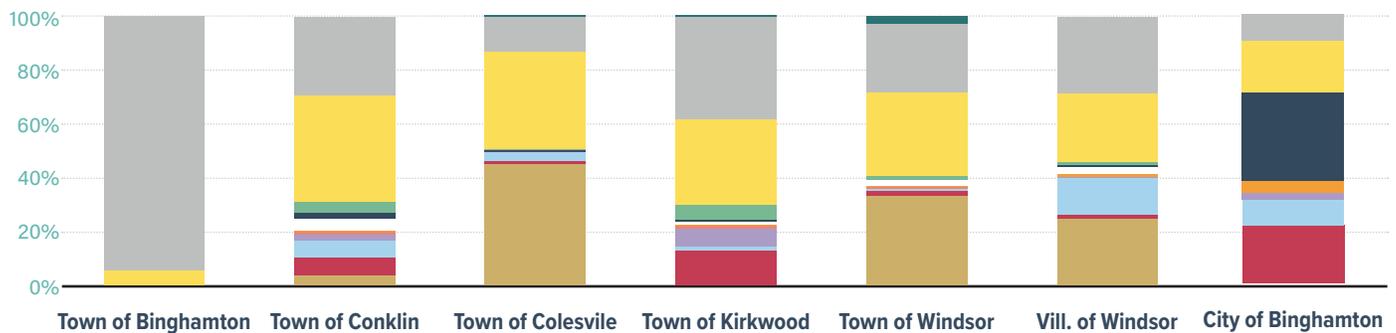
land use exceeds 20% of municipality's total land area in the WRA

Note: Land use percentages within the city of Binghamton are not included in this chart. See the following page for a breakdown of land use percentages for the city of Binghamton.

EXISTING LAND USES: **LAND USE IN THE UPPER SUSQUEHANNA SUB-BASIN**



**PERCENT LAND USE COVER BY MUNICIPALITY IN THE WRA** (SEE MAP LEGEND FOR COLOR KEY)



## SECTION 2.5

## EXISTING LAND USES (CONT.)

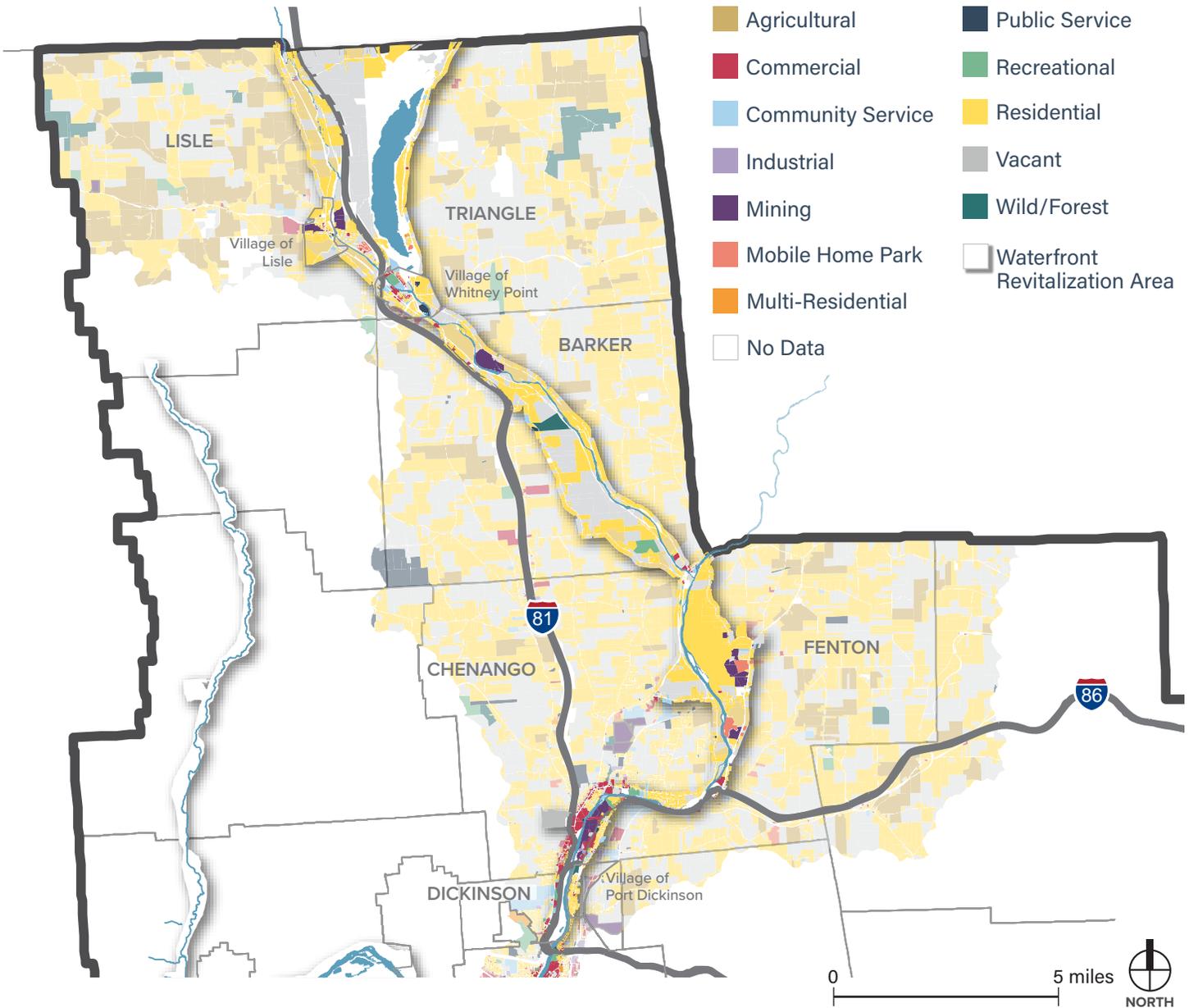
TABLE 2.7: LAND USES IN CHENANGO SUB-BASIN (TOWNS)

	Town of Lisle total area in WRA: 3,919 acres		Town of Triangle total area in WRA: 1,976 acres		Town of Barker total area in WRA: 4,218 acres		Town of Chenango total area in WRA: 1,692 acres		Town of Fenton total area in WRA: 2,493 acres		Town of Dickinson total area in WRA: 153 acres	
	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)
<b>Agricultural</b>	16	17% (680.8)	5	9% (181.3)	11	12% (522.7)	4	5% (91.5)	4	5% (111.3)	-	-
<b>Commercial</b>	6	<1% (7.4)	6	1% (11.9)	17	1% (33)	132	11% (191.4)	42	3% (80.1)	20	15% (23.5)
<b>Community Services</b>	6	<1% (2.3)	7	2% (47.5)	11	1% (26)	20	3% (49.1)	19	1% (30.9)	6	17% (26.3)
<b>Mining</b>	5	3% (109.9)	-	-	2	3% (119.4)	-	-	18	12% (296.1)	-	-
<b>Industrial</b>	2	<1% (6.2)	2	<1% (2.0)	-	-	-	-	3	<1% (9.5)	-	-
<b>Mobile Home Park</b>	1	1% (22.4)	2	1% (28.5)	2	<1% (1.3)	1	<1% (2.7)	8	4% (110.1)	-	-
<b>Multi-Residential</b>	-	-	5	<1% (7.7)	2	<1% (2.8)	8	<1% (5.9)	4	<1% (2.2)	1	<1% (0.4)
<b>No Data</b>	9	2% (63.1)	4	3% (50.9)	3	<1% (10.6)	5	2% (40.4)	7	2% (37.6)	-	-
<b>Public Services</b>	4	1% (24.2)	-	-	5	<1% (7.7)	8	<1% (5.7)	1	<1% (3)	-	-
<b>Recreational</b>	-	-	-	-	1	2% (84.3)	7	2% (29.3)	1	1% (13)	2	8% (12.6)
<b>Residential</b>	218	25% (994.1)	158	34% (665.1)	280	39% (1,638)	951	40% (683)	551	62% (1,535.2)	85	40% (60.6)
<b>Vacant</b>	151	51% (2,008)	120	50% (981.3)	167	40% (1,656)	194	35% (592.8)	138	10% (249.7)	12	10% (15)
<b>Wild/Forest</b>	-	-	-	-	1	3% (115.8)	-	-	1	1% (14.2)	1	9% (14.2)

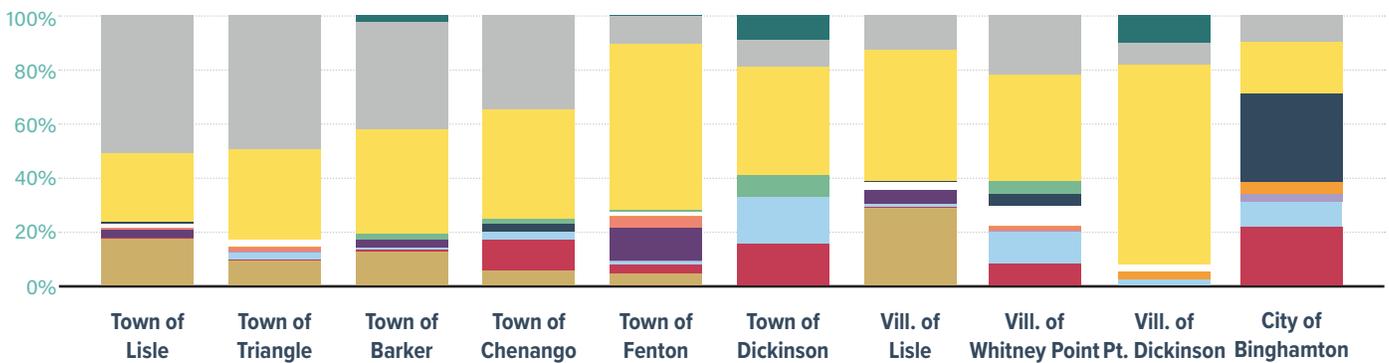
land use exceeds 20% of municipality's total land area in the WRA

Note: Land use percentages within the city of Binghamton are not included in this chart. See the following page for a breakdown of land use percentages for the city of Binghamton.

EXISTING LAND USES: **LAND USE IN THE CHENANGO SUB-BASIN**



**PERCENT LAND USE COVER BY MUNICIPALITY IN THE WRA** (SEE MAP LEGEND FOR COLOR KEY)



## SECTION 2.5

# EXISTING LAND USES (CONT.)

TABLE 2.8: LAND USES IN CHENANGO SUB-BASIN (VILLAGES)

	Village of Lisle total area in WRA: 738 acres		Village of Whitney Point total area in WRA: 611 acres		Village of Port Dickinson total area in WRA: 141 acres	
	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)
<b>Agricultural</b>	3	29% (210.8)	2	<1% (3.6)	-	-
<b>Commercial</b>	12	1% (3.6)	55	8% (47.7)	10	2% (2.6)
<b>Community Services</b>	5	1% (6.6)	19	12% (71.7)	5	2% (3.2)
<b>Mining</b>	1	5% (38.8)	-	-	-	-
<b>Industrial</b>	-	-	2	<1% (1.7)	-	-
<b>Mobile Home Park</b>	-	-	2	1% (8.6)	-	-
<b>Multi-Residential</b>	3	<1% (1.1)	-	-	7	2% (3.5)
<b>No Data</b>	9	3% (20.9)	3	7% (44.4)	5	2% (3.5)
<b>Public Services</b>	3	<1% (2.1)	4	4% (26.7)	-	-
<b>Recreational</b>	1	<1% (1.5)	2	5% (29.8)	-	-
<b>Residential</b>	108	49% (358.8)	278	39% (238.8)	274	72% (102)
<b>Vacant</b>	44	13% (93.6)	88	22% (134.1)	26	8% (11.4)
<b>Wild/Forest</b>	-	-	-	-	1	10% (14.2)

land use exceeds 20% of municipality's total land area in the WRA



**Whitney Point Dam and Reservoir** (top). **Downtown Whitney Point** (middle). **Chenango River at Chenango Bridge Park** (bottom left). **Residential neighborhood in the Town of Chenango** (bottom right). Image credits: Bergmann

## SECTION 2.5

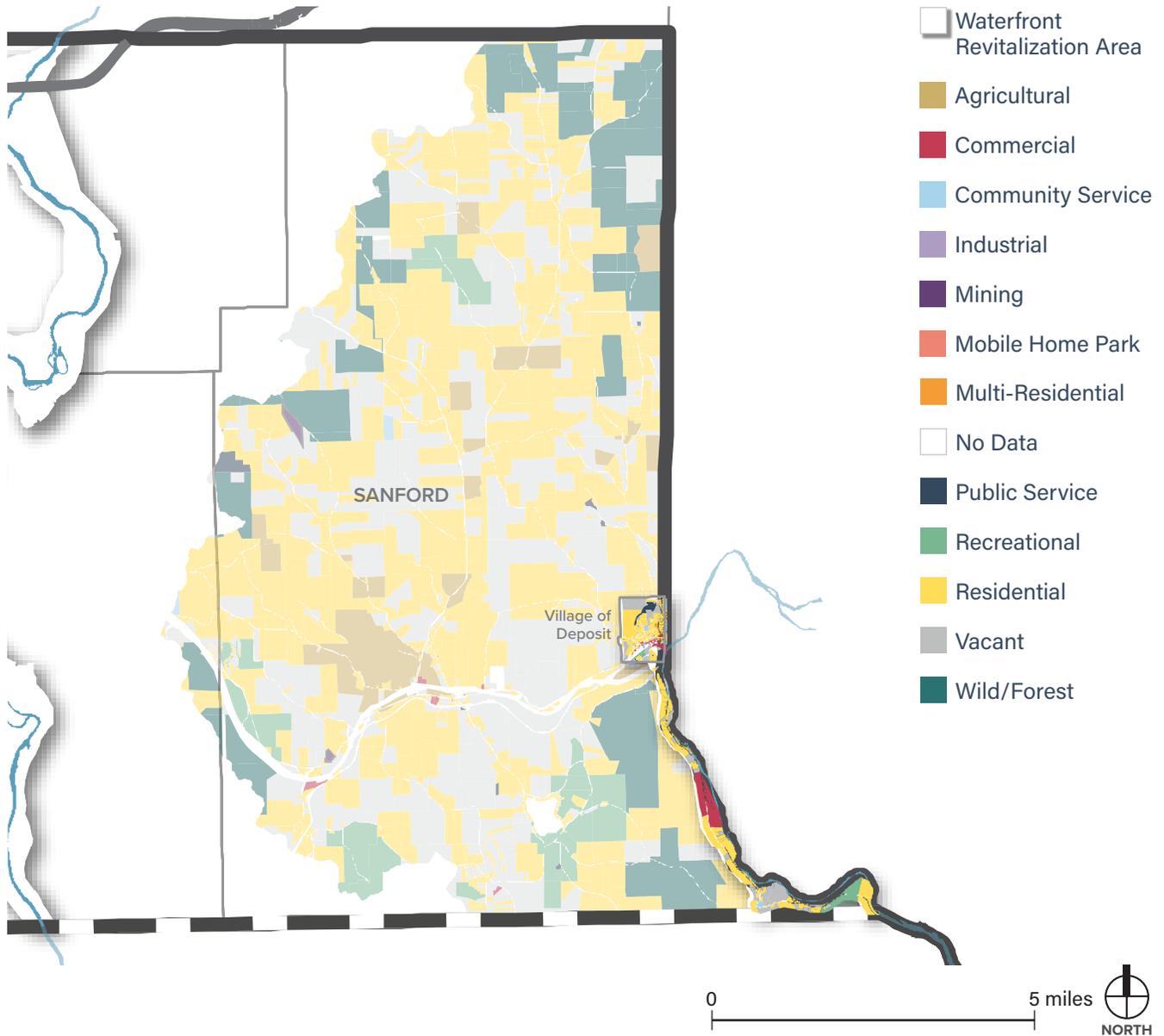
# EXISTING LAND USES (CONT.)

TABLE 2.9: LAND USES IN UPPER DELAWARE SUB-BASIN

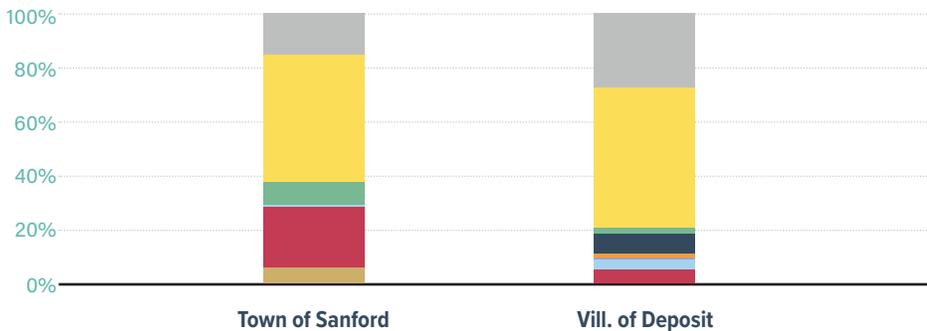
	Town of Sanford total area in WRA: 700 acres		Village of Deposit total area in WRA: 361 acres	
	# of parcels	% of total area (acres)	# of parcels	% of total area (acres)
Agricultural	2	6% (40)	1	<1% (0.1)
Commercial	2	22% (156.5)	48	5% (17.4)
Community Services	2	1% (7.1)	12	4% (15.3)
Mining	-	-	-	-
Industrial	-	-	3	<1% (0.6)
Mobile Home Park	-	-	-	-
Multi-Residential	-	-	7	1% (5)
No Data	2	<1% (0.01)	10	<1% (1.2)
Public Services	-	-	12	8% (27.3)
Recreational	1	8% (59)	6	2% (7.2)
Residential	77	47% (332.2)	293	52% (187.4)
Vacant	52	15% (105.5)	81	28% (99.3)
Wild/Forest	-	-	-	-

land use exceeds 20% of municipality's total land area in the WRA

EXISTING LAND USES: **LAND USE IN THE UPPER DELAWARE SUB-BASIN**



**PERCENT LAND USE COVER BY MUNICIPALITY IN THE WRA** (SEE MAP LEGEND FOR COLOR KEY)



## SECTION 2.6

# BROWNFIELD & UNDERUTILIZED SITES

**Brownfields and underutilized sites occur throughout the WRA. Despite potential environmental challenges, these sites present opportunities for remediating and redeveloping waterfront sites as well as enhancing public waterfront access.**

### BROWNFIELDS

A brownfield is a site where the reuse, redevelopment, or expansion of that site may be complicated by the presence or perceived presence of a hazardous substance, pollutant, or contaminant. Brownfield sites are often abandoned or underutilized given the potentially significant environmental remediation required to convert the site to a safe, productive use.

Within the WRA, there are 29 brownfield sites, as identified by the NYS Department of Environmental Conservation. These sites are clustered along the lower Susquehanna and Chenango Rivers in the urbanized areas surrounding the City of Binghamton. Beyond the urban centers near the confluence of the Susquehanna and Chenango Rivers, the Town of Lisle landfill and the former Agway Plant in the Village of Deposit are also brownfields.

Nine of the 29 brownfield sites are actively participating in clean-up programs to remediate contamination on-site. These remediation sites are located in the Towns of Conklin, Kirkwood, and Vestal and the Villages of Endicott and Johnson City. Once environmental remediation is complete, these sites may be potential candidates for redevelopment that meets the economic development and natural resource protection needs of the local municipality and county as a whole.

Further, The following communities, located partially or fully within the WRA, have gone through or are completing the NYSDOS Brownfield Opportunity Areas (BOA) program:

- Binghamton First Ward BOA
- Brandywine BOA
- Endicott Johnson Industrial Spine BOA
- North Chenango River Corridor BOA
- Endicott (working on BOA Nomination Study in their downtown area)

### UNDERUTILIZED SITES

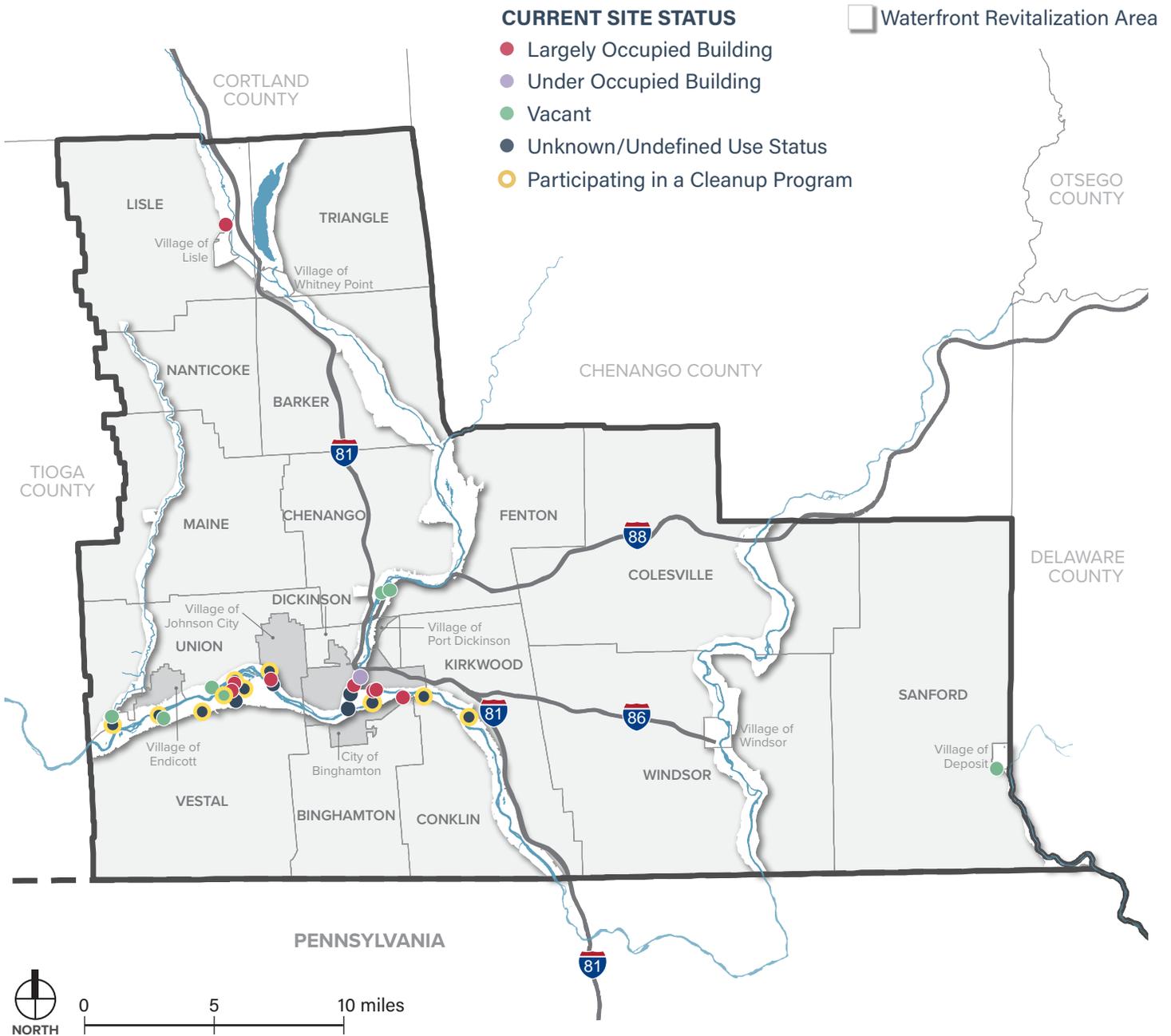
Abandoned and vacant buildings and sites occur throughout the WRA. These underutilized sites represent potential opportunities for public and/or private redevelopment, including:

- Northgate Plaza in the Town of Chenango;
- The inactive Johnson City, Vestal, and Windsor rail lines; and,
- The Westover generation plant (closed in 2013) located in the Town of Union.



**US Airforce Plant 59 remediation site in Johnson City, along Main Street / NYS Route 17C (Image credit: Google Maps).**

BROWNFIELD & UNDERUTILIZED SITES: **BROWNFIELDS**



**BROWNFIELD SITES UNDERGOING REMEDIATION IN THE WRA**

Town of Conklin

Nesco/Savin Site

Town of Kirkwood

Gorick Dump

Town of Vestal

Chevron USA  
 Hidden Valley Electronics  
 Robintech, Inc.  
 Vestal Water Supply (Sites 1-1, 4-2)

Village of Endicott

Endicott Landfill

Village of Johnson City

US Airforce Plant 59 (BAE site)

City of Binghamton

The City of Binghamton have a number of Brownfield Sites undergoing remediation in the WRA including, NYSEG - Binghamton Washington St MGP, Binghamton Plaza, 24 Water Street, 435 State Street, 8 Jackson Street, and 295-305 Court Street

## SECTION 2.7

# WATER-DEPENDENT USES

**Water-dependent uses within Broome County include a wide array of activities that rely on direct access to the water such as, boating and fishing.**

Due to generally low water levels in many places in the County, there are limitations to certain watercraft types. Other obstacles that exist that limit water use include water current dangers for recreational users, high flow rates that affect the quality of drinking water and a series of dams along the Susquehanna River. The dams limit the area in which boaters with deeper craft can travel and create a further barrier to paddlers in canoes or kayaks.

### BOAT LAUNCHES

The most favorable transit method by water includes non-motorized boats, such as canoes, kayaks and rowboats. There are 28 publicly-accessible boat launches within the WRA. The boat launches consist of hand carry launches and paved boat launch ramps. Generally, paved boat launch ramps are located where the waters are deep enough for a motorboat to operate safely. Several of the boat launches are located within parks and include amenities such as restrooms and motor vehicle parking areas. More information regarding the location and amenities provided at each of the 28 boat launches in the WRA are summarized on the following page(s).

## WATER-DEPENDENT AND WATER-ENHANCED USES

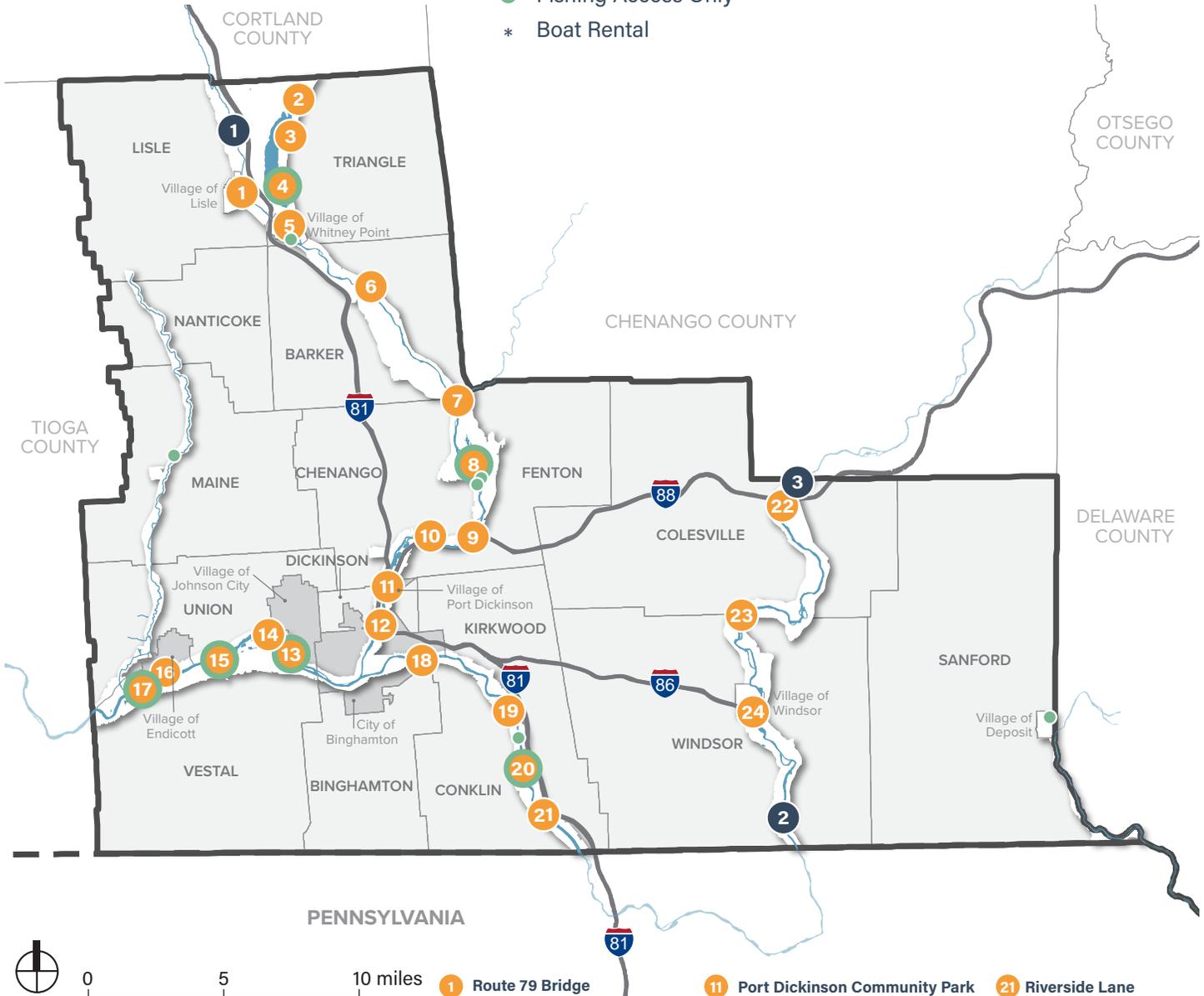
NYS DOS differentiates between water-dependent and water-enhanced uses in the development of an LWRS.

**Water-dependent uses** are defined as a business or other activity which can only be conducted in on, over, or adjacent to a water body because such activity requires direct access to that water body, and which involves, as an integral part of such activity, the use of the water (from 19 NYCRR 600.2). Examples of these types of uses include boat launches, fishing access areas, and swimming.

**Water-enhanced uses** are defined as a use or activity which does not require a location adjacent to [an eligible inland waterway, but whose location on the waterfront adds to the public use and enjoyment of the water's edge. Water-enhanced uses are primarily recreational, cultural, retail, or entertainment uses (from 19 NYCRR 600.2). Examples of water-enhanced uses include parks, public plazas, and trail systems.

EXISTING WATER USES: **PUBLIC WATER ACCESS**

- Boat Launch
- Boat Launch (privately-owned)
- Boat Launch with Fishing Access
- Fishing Access Only
- \* Boat Rental
- Waterfront Revitalization Area



- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>1 Route 79 Bridge</li> <li>2 Upper Lisle Road</li> <li>3 Keible Road</li> <li>4 Dorchester Park*</li> <li>5 Route 206 Bridge</li> <li>6 Itaska</li> <li>7 Chenango Forks</li> <li>8 Chenango Valley State Park*</li> <li>9 Port Crane</li> <li>10 Chenango Bridge</li> </ul> | <ul style="list-style-type: none"> <li>11 Port Dickinson Community Park</li> <li>12 Ostiningo Park</li> <li>13 Route 201 Bridge</li> <li>14 William Hill Park</li> <li>15 Harold Moore Park</li> <li>16 Riverview Park</li> <li>17 Grippen Park</li> <li>18 Sandy Beach Park</li> <li>19 Sullivan Park</li> <li>20 Veterans River Park</li> </ul> | <ul style="list-style-type: none"> <li>21 Riverside Lane</li> <li>22 Nineveh Bridge</li> <li>23 Ouaquaga Bridge</li> <li>24 South Windsor</li> <li>1 Lighthouse Landing*</li> <li>2 Pine Crest Campground</li> <li>3 Enchanted Gardens*</li> </ul> |
|---|---|--|

## SECTION 2.7

# WATER-DEPENDENT USES (CONT.)

### Town of Triangle

- **Dorchester Park:** This county park features a concrete ramp boat launch with an easy access launching area. Additional features include, rental boats, restrooms and thirty parking spaces.
- **Upper Lisle Bridge:** This NYS DEC-owned site features a dirt ramp boat launch, ten cars and trailers. Prevalent invasive species can be found in this area, including Eurasian Watermilfoil, Water Chestnut and Curly-lead Pondweed.
- **Whitney Point Reservoir:** There are seven boat launches with hand ramps located on the west side of the reservoir. These boat launches feature waterfront access and are popular fishing destinations for a variety of fish species (Walleye, smallmouth bass, white crappie and others). The only Keibel Road location that features more than three parking spaces is Keibel Road # 7. None of the launches include restrooms.

### Village of Whitney Point

- **Route 206 Bridge Whitney Point:** This site features a boat launch dirt ramp, eight parking spaces and restrooms. Shore fishing is permitted at this location.

### Town of Lisle

- **Lighthouse Landing:** This privately owned site features a boat launch hand ramp with white wooden lighthouse shaped signage. Additional features include, 25 parking spaces and restrooms. Permitted activities at this site include, tubing, canoeing and kayaking. Rental boats sale purchases are available.

### Village of Lisle

- **Route 79 Lisle:** This NYS DEC-owned site features a boat launch hand ramp, and 5 parking spaces.

### Town of Barker

- **Itaska DEC:** This NYS DEC-owned boat launch is accessible from NY Route 79 includes a hand ramp and 6 parking spaces. No restrooms are available at this site.

### Town of Chenango

- **Chenango Bridge DEC:** This Town-owned boat launch hand ramp area features 15 parking spaces and no public restrooms. This site can be accessed down a dirt road under the Route 12A bridge. Additional features include green metal park and ride signage and shore fishing is permitted.
- **Chenango Forks DEC:** This NYS DEC-owned site features a boat launch hand ramp and 12 parking spaces. There are no restrooms available on site. Additional features include wooden signage, a picnic table and shore fishing is permitted.

### Town of Fenton

- **Chenango Valley State Park:** This launch is located on the east bank of the Chenango River. The boat launch offers a concrete ramp for diverse boating. It also features offers boat rentals, a beach, picnic tables with pavilions, a playground, campground, trails, and fishing.
- **Port Crane:** This NYS DEC-owned site features a boat launch hand ramp, and parking for several vehicles.
- **Beer Tree:** Privately-owned farm microbrewery with access to the Chenango River. Boats must be hand carried to the water.

TABLE 2.10: PUBLIC BOAT LAUNCHES IN THE WRA

Boat Launch Name	River	Municipality	Type
<b>Dorchester Park</b>	Whitney Point Reservoir	Town of Triangle	Concrete Ramp
<b>Upper Lisle Bridge</b>	Whitney Point Reservoir	Town of Triangle	Dirt Ramp
<b>Whitney Point Reservoir</b> (7 different launches)	Whitney Point Reservoir	Town of Triangle	Hand Launch
<b>Route 206 Bridge Whitney Point</b>	Tioughnioga River	Village of Whitney Point	Dirt Ramp
<b>Lighthouse Landing</b>	Tioughnioga River	Town of Lisle	Hand Launch
<b>Route 79 Lisle</b>	Tioughnioga River	Village of Lisle	Hand Launch
<b>Itaska DEC</b>	Tioughnioga River	Town of Barker	Hand Launch
<b>Chenango Bridge DEC</b>	Chenango River	Town of Chenango	Hand Launch
<b>Chenango Forks DEC</b>	Chenango River	Town of Chenango	Hand Launch
<b>Chenango Valley State Park</b>	Chenango River	Town of Fenton	Concrete Ramp
<b>Port Crane DEC Launch</b>	Chenango River	Town of Fenton	Hand Launch
<b>Beer Tree</b>	Chenango River	Town of Port Crane	Hand Launch
<b>Otsiningo Park</b>	Chenango River	Town of Port Dickinson	Hand Launch
<b>Port Dickinson Community Park</b>	Chenango River	Village of Port Dickinson	Dirt Ramp
<b>14 South Street*</b>	Susquehanna River	City of Binghamton	Concrete Ramp
<b>Sandy Beach Park</b>	Susquehanna River	City of Binghamton	Concrete Ramp
<b>William Hill Park</b>	Susquehanna River	Town of Union	Hand Launch
<b>Harold Moore Park</b>	Susquehanna River	Town of Vestal	Concrete Ramp
<b>Grippen Park</b>	Susquehanna River	Village of Endicott	Concrete Ramp
<b>Riverview Park</b>	Susquehanna River	Village of Endicott	Hand Launch
<b>201 Bridge Johnson City</b>	Susquehanna River	Village of Johnson City	Hand Launch
<b>Sullivan Park</b>	Susquehanna River	Town of Conklin	Hand Launch
<b>Veterans River Park</b>	Susquehanna River	Town of Kirkwood	Dirt Ramp
<b>Riverside Lane</b>	Susquehanna River	Town of Kirkwood	Concrete Ramp
<b>Nineveh DEC</b>	Susquehanna River	Town of Colesville	Concrete Ramp
<b>Ouaquaga Bridge DEC</b>	Susquehanna River	Town of Colesville	Dirt Ramp
<b>Enchanted Gardens</b>	Susquehanna River	Town of Colesville	Dirt Ramp
<b>South Windsor</b>	Susquehanna River	Village of Windsor	Hand Launch
<b>Pine Crest Campground</b>	Susquehanna River	Town of Windsor	Concrete Ramp

\* 14 South Street is not an official launch site, but it serves as a portage point just before the Rockbottom Dam.

## SECTION 2.7

# WATER-DEPENDENT USES (CONT.)

### Village of Port Dickinson

- **Port Dickinson Jeanne and John D. Wifley Community Park:** This popular Village park features a boat launch with a paved ramp, 50 parking spaces and playground amenities. Additional features include a large wooden sign upon entry, restrooms and shore fishing is permitted.

### Town of Port Dickinson

- **Otsiningo Park:** This County park features the only public boat launch located on the west bank of the Chenango River in Broome County. The boat launch is a dirt ramp style with ease of access for visitors. It features 10 parking spaces and public restrooms.

### Town of Union

- **William Hill Park:** Hill Park is located on the same side of the Susquehanna River and features a hand carry launch area. This feature allows canoer/kayakers ease of access to multiple downstream islands in the river. There are 10 parking spaces and restrooms in the area.

### Town of Vestal

- **Harold Moore Park:** This neighborhood park features a concrete boat ramp for river access to the Susquehanna River and restrooms. This park offers on-site parking.

### Village of Endicott

- **Grippen Park:** This County park features a boat launch ramp. Although the ramp is functional, additional improvements would enhance river access from this site, such as: interpretive signage, benches, an overlook picnic shelter, and an accessible fishing platform. There are approximately 10 parking spaces and restrooms are available at the adjacent BMX track.

- **Riverview Park:** Located under the McKinley Avenue Bridge, this boat launch includes a hand ramp and 8 parking spaces. The eastern terminus of the Chugnut Trail is accessible at this location.

### Village of Johnson City

- **201 Bridge Johnson City:** This boat launch hand ramp features 15 parking spaces and no public restrooms on-site.

### Town of Conklin

- **Sullivan Park:** This Town park includes a boat launch with a hand ramp and five parking spaces. There are no restrooms available on-site.

### Town of Kirkwood

- **Veterans River Park:** This Town park features a boat dirt ramp, public restrooms and 10 parking spaces on site. Improvements to this boat ramp area could include a fishing platform and interpretive signs along the waterfront edge.
- **Riverside Lane:** The Town of Kirkwood recently installed a public boat launch, accessible by Riverside Lane, along a slow-moving portion of the Susquehanna River. This launch includes a concrete ramp and parking for 10 vehicles.

### Town of Colesville

- **Nineveh DEC:** This NYS DEC-owned site includes a boat launch with a concrete ramp and 15 parking spaces. There are no public restrooms on-site.
- **Ouaquaga Bridge DEC:** This DEC-owned site features a dirt ramp boat launch and 19 parking spaces. Public restrooms are not available on-site.

- **Enchanted Gardens:** This privately-owned site features canoes and kayak rentals.

### Village of Windsor

- **South Windsor:** This Village-owned site includes a dirt ramp boat launch, 19 parking spaces, and is within walking distance of the Village's downtown. Restrooms are not available on-site.

### Town of Windsor

- **Pine Crest Campground:** This site features a concrete ramp boat launch, 20 parking spaces, and public restrooms are provided on-site.

### City of Binghamton

- **Sandy Beach Park:** This municipally-owned boat launch includes a concrete ramp and 20 parking spaces. This park and boat launch provide access to the southern shoreline of the Susquehanna River and are accessed by NYS Route 7 (Conklin Aveune).

## FISHING ACCESS

Another notable activity in the County is fishing, whether from the shoreline or from a boat. Numerous fish species can be found in the local riverways including popular species, such as northern pike, walleye, smallmouth bass, rainbow trout, brown trout, and tiger muskie.

There are 12 public fishing access points in the WRA, which are summarized in the table below. Most public fishing access points provide

primitive amenities (e.g., parking), and only three fishing access locations feature restrooms (Chenango Valley State Park, Harold Moore Park and Whitney Point Multiple Use Area).

In addition to fishing access along the major rivers, the NYS DEC has obtained public fishing rights along portions of Nanticoke Creek and Oquaga Creek. The NYS DEC is working towards establishing parking facilities for fishing on Nanticoke Creek.

## SECTION 2.7

# WATER-DEPENDENT USES (CONT.)

TABLE 2.11: PUBLIC FISHING ACCESS LOCATIONS IN THE WRA

Name	River	Municipality	Permitted Boat Type
Chenango River	Chenango River	Town of Fenton	Canoe
Chenango Valley State Park	Chenango River	Town of Fenton	Rentals Only
Chenango River Fishing Access Site	Chenango River	Town of Fenton	Canoe
Ostelic River	Tioughnioga River	Village of Whitney Point	Canoe
Whitney Point Multiple Use Area	Whitney Point Lake	Town of Triangle	Motorboat
Grippen Park	Susquehanna River	Village of Endicott	Canoe, Small Motorboat
Harold Moore Park	Susquehanna River	Town of Vestal	Canoe, Small Motorboat
Nanticoke Creek	Nanticoke Creek	Town of Maine	No Boat Access
Route 201 Bridge	Susquehanna River	Village of Johnson City	Canoe
Schnurbusch Park	Susquehanna River	Town of Conklin	Canoe
Veterans River Park	Susquehanna River	Town of Kirkwood	Canoe, Small Motorboat
Palmers Pond	Delaware River	Village of Deposit	No Boat Access



**Chenango River  
Fishing Access Site**

N.Y.S. Dept. of Environmental Conservation

*in cooperation with*

New York State Dept. of Transportation

Federal Aid Project supported by your purchase of  
fishing licenses, fishing equipment and motorboat fuels.

## SECTION 2.8

# PROPERTY OWNERSHIP

### Total Land Area in the WRA:

**32,247 acres**

(Land coverage assessment is based on the total are of documented land use; excludes right-of-ways and other undefined lands)

### Public Land in the WRA:

**~5,725 acres**

(18% of WRA land area)

### Private Land in the WRA:

**~26,522 acres**

(82% of WRA land area)

### Breakdown of Public Land Ownership in WRA:

**Municipal: 1,404 acres**

(25% of public land in WRA)

**Broome County: 167 acres**

(3% of public land in WRA)

**New York State: 1,315 acres**

(22% of public land in WRA)

**Federal: 2,839 acres**

(50% of public land in WRA)

**Property ownership directly affects the LWRS as it relates to waterfront access and potential use of lands, with publicly owned land providing potential opportunities for enhanced public access to the waterfront.**

This section identifies publicly-owned land (local, county, state, federal) and privately-owned land in the Broome County WRA. The WRA is comprised of 32,247 acres of land (excluding right-of-ways), with private land ownership accounting for 26,522 acres, or 82% of the WRA, and public land ownership accounting for 5,725 acres or 18% of the total WRA. The breakdown of land ownership is described in further detail below.

## PUBLIC OWNERSHIP

The WRA is home to local, county, state and federally owned public lands. A breakdown of publicly owned lands within the WRA is provided below.

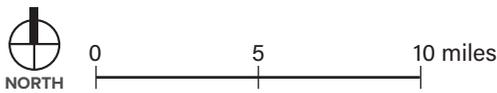
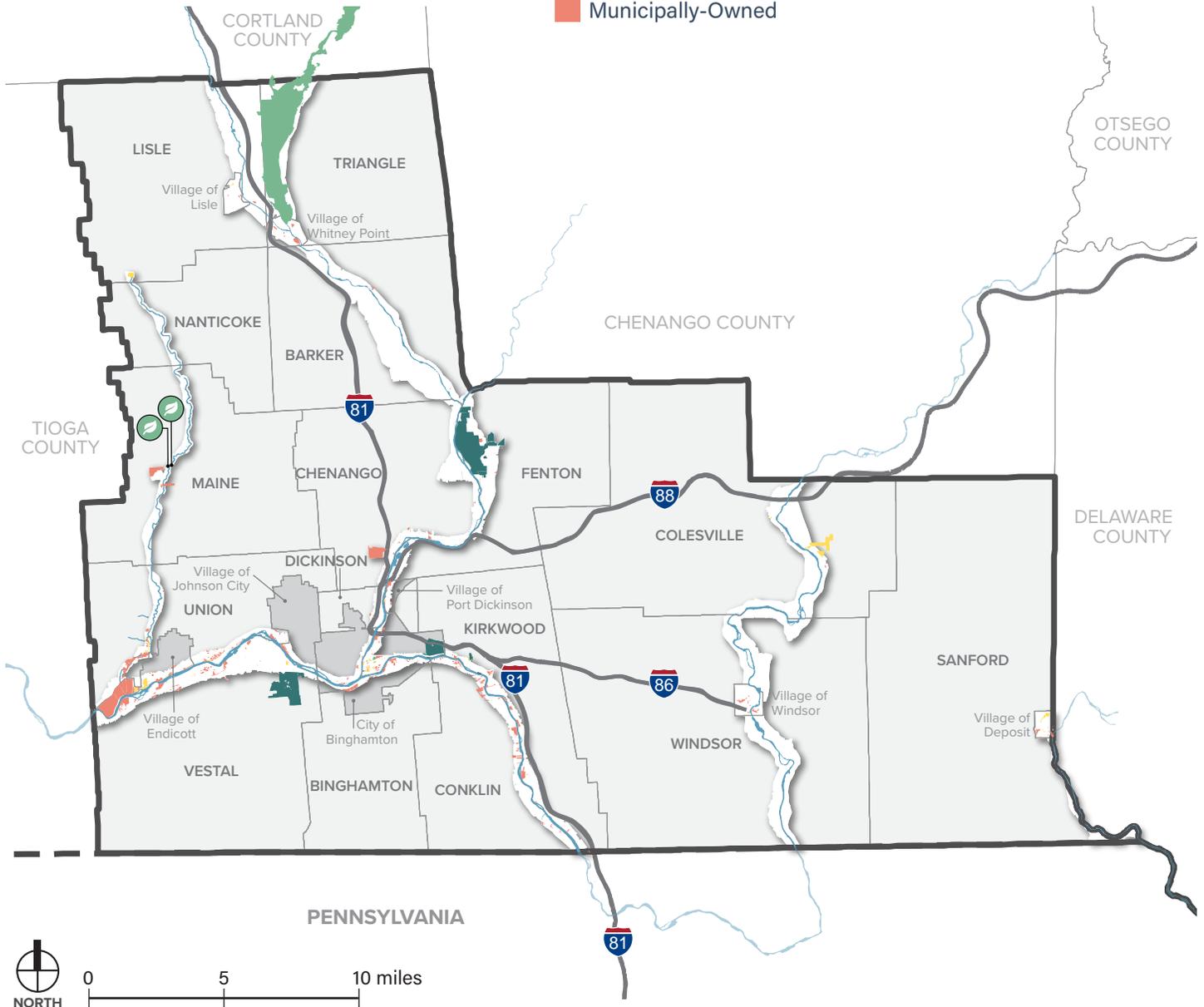
### Municipally-Owned Property

There are over 650 municipally-owned properties covering approximately 4% of the total land area within the WRA. Combined, these lands comprise approximately 1,400 acres. Prominent publicly-owned, municipal parcels are described below:

- The Village of Endicott owns the largest amount of municipally-owned land, accounting for over 495 acres within the WRA. Approximately 117 acres encompass 12 parks and recreational sites within the WRA. Roughly 41 acres comprise parks, Mersereau Park and Round Top Park Picnic Area, while 76 acres comprise of the En-Joie Golf Course (owned by the Village of Endicott, but operated by Broome County), a historical focal point of golf in the Southern Tier. These recreational sites offer scenic views of the Susquehanna River. Public service uses within the Village include the Tri-Cities airport (224 acres) and the Endicott Wastewater Treatment Facility (80 acres). The remainder of municipally-owned parcels include vacant land and community service uses.
- The Town of Union owns approximately 160 acres of land within the WRA, including several parks — Argonne Neighborhood Park, Glendale Park and William Hill Park. William Hill Park comprises nearly 12 acres of park land that features playground equipment, green space and picnic shelters.

PROPERTY OWNERSHIP: **PUBLICLY-OWNED LAND**

- Federally-Owned
- State-Owned
- County-Owned
- Municipally-Owned
- Waterfront Revitalization Area
- National Conservation Easement



## SECTION 2.8

# PROPERTY OWNERSHIP (CONT.)

- The Town of Chenango owns various recreational sites including Wolfe Park, Broad Acres Park, Otsiningo North and Chenango Bridge Park that account for the majority of the total acreage (156 acres) within the WRA. Wolfe Park features over 140 acres of hiking and nature trails, all other parks along with vacant and public service lands comprise the remainder of acreage. Otsiningo North was recently connected to the original Otsiningo Park as a joint effort between Broome County and the Town of Chenango. This park features a vast soccer complex and extensive walking trails from Otsiningo South that extend into the northern section of the park. In 2023, the Broome County PetSafe Dog Park opened at Otsiningo North equipped with two separate fenced-in areas; one for large dogs and one for small dogs as well amenities for dogs and humans to enjoy.
- The Town of Vestal owns approximately 150 acres of land within the WRA, featuring the following recreational sites: African Road Park, Memorial Park, Harold Moore Park, Barlow Park and the Vestal Rail Trail. Harold Moore Park features a boat ramp offering access to the riverfront. The Vestal Rail Trail is comprised of two sections totaling nearly three and half miles; the trail is located just north of and parallel to Vestal Parkway (Rte. 434) and runs parallel to Route 17. The entire trail is located within the WRA, offering a 12-foot paved path and greenery on both sides of the trail.
- The Town of Conklin owns approximately 115 acres within the WRA, featuring two parks that are located along the banks of the Susquehanna River; Schnurbusch Park and Sullivan Park. Schnurbusch Park is the largest park in the Town and features a variety

of recreational activities and a municipal pool. Sullivan Park is situated across from the Floyd Maines Community Center and features a boat launch for small hand-carried vessels, such as canoes and kayaks.

- Each of the remaining municipalities within the WRA own less than 100 acres of land. Overall, most of the municipally-owned land is comprised of uses such as recreational sites (e.g., parks), public services (e.g., police and fire departments), community services (e.g., libraries), vacant land and natural areas (e.g., green space, hiking trails).

### County-Owned Property

Broome County owns less than 1% of the total land area, or approximately 161 acres, within the WRA. The majority of the lands include county owned parks and recreational sites such as Grippen Park, Roundtop Park, and Dorchester Park. Each of the County's parks and facilities offer year-round recreational opportunities.

Grippen Park and Roundtop Park are located in the Village of Endicott. Grippen Park offers a float-off boat ramp for easy access to the Susquehanna River for non-motorized watercraft. Renovations are currently underway at Grippen Park to transform the former ice rink into year-round recreational facility. In addition to the building upgrades and added amenities, Broome County secured over \$2.6 million in grant funding from the New York State Department of State Local Waterfront Revitalization Program (LWRP) for the Grippen Park and Chugnut Trail extension project.

Nearby Round Top Park offers passive recreation opportunities and scenic views of the Susquehanna River Valley. A hiking trail connects Roundtop Park and Grippen Park in the WRA.

TABLE 2.12: PUBLICLY-OWNED LAND IN THE WRA

Owner Name	Land Area in WRA (acres)
<b>MUNICIPALLY-OWNED</b>	<b>1,404 acres</b>
City of Binghamton	>1
Town of Barker	4
Town of Chenango	156
Town of Colesville	2
Town of Conklin	115
Town of Dickinson	3
Town of Fenton	13
Town of Kirkwood	88
Town of Maine	72
Town of Sanford	2
Town of Triangle	8
Town of Union	158
Town of Vestal	152
Town of Windsor	8
Village of Deposit	23
Village of Endicott	496
Village of Johnson City	24
Village of Lisle	3
Village of Port Dickinson	16
Village of Whitney Point	39
Village of Windsor	22
<b>COUNTY-OWNED</b>	<b>167 acres</b>
Broome County	167
<b>STATE-OWNED</b>	<b>1,315 acres</b>
New York State	1,283
State University of New York	32
<b>FEDERALLY-OWNED</b>	<b>2,839 acres</b>
City of Binghamton	7
U.S. Army Corps of Engineers	2,832

## SECTION 2.8

# PROPERTY OWNERSHIP (CONT.)

Dorchester Park is located in the Town of Triangle and offers a launching area for easy access to the 1,200-acre Whitney Point Reservoir. This park is home to many of the County's annual events and festivals including the Annual Broome County Parks Triathlon and the Almost-Annual Crappie Derby ice fishing contest.

While not included in the WRA, Greenwood Park is recognized for offering a diversity of recreational options, including boating, swimming and camping. The park also offers numerous amenities including picnic shelters, playground equipment, and boat rentals.

Aside from parkland, the County owns a number of public service facilities, including the Office for People with Developmental Disabilities and Broome County Transit. Located in Johnson City, the Office for People with Developmental Disabilities strives to improve and better connect individuals with developmental disabilities with the proper resources and services. Broome County Transit Department is located in Vestal and provides quality public transportation services. Most of the County land within the WRA includes vacant space, agriculture land, public services and community services.

### New York State

Approximately 4% of the WRA land area is owned by New York State, covering 1,115 acres. Chenango Valley State Park is located within the Town of Chenango, in the WRA, and is operated by the New York State Department of Parks, Recreation, and Historic Preservation (OPRHP). Chenango Valley State Park is adjacent to the Chenango River and offers many recreational activities for residents and visitors, including camping, hunting, sledding, fishing, hiking, biking and swimming.

### State University of New York (SUNY)

Approximately 32 acres of a 580-acre SUNY-owned property is located in the WRA in the Town of Vestal. These lands are located on Vestal East Parkway, which encompass parts of the SUNY Binghamton campus and its surrounding facilities, including the Center of Excellence and Binghamton University Nature Preserve, which lies approximately 5-miles from the WRA boundary.

Although, not within the WRA boundaries, the Binghamton University Nature Preserve is a significant natural area and consists of federal wetlands, nature trails and various wildlife habitats. This preserve is classified as conservation land and is owned and operated by Binghamton University. The nearly 182-acre preserve includes 20 acres of wetland and is within a 5-mile radius of the WRA, within the Town of Vestal.

### Federal - U.S Army Corps of Engineers

The Whitney Point Reservoir is the largest federally-owned land in Broome County. The reservoir and dam are located within the Otselic River and provide flood control for the valley along the lower Tioughnioga, Chenango and Susquehanna Rivers. This dam provides numerous recreational opportunities, such as shoreline fishing, boat rentals and picnicking one mile north of the reservoir at Dorchester Park. The dam is owned and operated by the U.S Army Corps of Engineers. In addition to the Whitney Point Reservoir, approximately 7% of federally-owned lands in Broome County are situated within the City of Binghamton. These lands include the post office and several other federal buildings and parcels scattered throughout the city.



WHITNEY POINT RESERVOIR



DORCHESTER COUNTY PARK



OTSININGO COUNTY PARK



PORT DICKINSON COMMUNITY PARK



ROUNDTOP COUNTY PARK



SCHNURBUSCH PARK

## SECTION 2.8

# PROPERTY OWNERSHIP (CONT.)

### PRIVATE LANDS

Approximately 82% of the total land area, or 26,522 acres, within the WRA is privately owned.

#### Institutional and Not For Profits

Institutional and Not for Profits lands are generally owned by a not for profit entity such as a higher education institution or a 501(c)(3).

Situated in the WRA is the IBM Glen area, located in the Town of Union. This 205-acre property was once owned by IBM as a recreational resource for its employees. Local conservation groups donated this property for preservation purposes and the property is now under the ownership of the Chenango Land Trust (CLT) through a conservation easement and is managed by the Waterman Conservation Center (WCC).

The WCC also owns a 103-acre nature preserve located within the WRA in the Town of Windsor, known as Pettis Hill Preserve. This preserve is dedicated to protecting the vital habitats and species that are unique to the area allowing visitors to view the preserve through trail networks. This property is one of the highest points in Broome County and was donated by Charles Pettus, a retired IBM Engineer and Physicist in 2013. Pettus's grave and memorial is situated at the base of a "pyramid" of soil and rock and provides an impressive overlook and view of the area.

### PROPERTY VALUES

The average property value in the Broome County WRA is approximately \$175,000 and the median property value is \$35,000. Comparatively, the average property value in Broome County is approximately \$91,400 and the median property value is \$43,000. Property values above the median in the WRA are concentrated in the Town of Vestal, along the upper reaches of Nanticoke Creek, along the Tioughnioga River, along the Susquehanna River in the Town of Windsor, and along the Delaware River in the Town of Sanford.

### CONSERVATION EASEMENTS

Conservation easements are voluntary legal agreements between a land owner and land trust or government agency that permanently limits uses of the land in order to protect its conservation values. There are four conservation easements in the WRA.

The Chenango Land Trust (CLT) holds conservation easements on two properties in the WRA. In the Town of Sanford, CLT has a conservation easement on a 198 acre working forest, which features small streams, agricultural uses, and active timber production on soft- and hardwood stands. In the Town of Maine, CLT has a conservation easement protecting 77 acres of forested hillsides, agricultural uses, and portions of Nanticoke Creek.

There are two additional conservation easements in the Town of Maine. These easements total less than one acre of land in the WRA.



## SECTION 2.9

# NATURAL RESOURCES

**This section focuses on the types, distributions, and management of natural resources within and related to the WRA. Topics addressed in this section include: wetlands, critical environmental areas, geological features and soils, wildlife management areas, and endangered and threatened species.**

### OVERVIEW

The County's landscape covers a densely populated urban core, with neighboring suburban areas that are surrounded by rural landscapes. The river valleys along the Susquehanna River and its major tributaries (Chenango, Tioughnioga and Otselic Rivers), as well as a small section of the Delaware River, define the natural landscape of the County. Situated in the Appalachian Plateau, the County is bisected by multiple streams and river valleys. Natural resources within the County, discussed in further detail below, include scenic resources, wetlands, critical environmental areas, geological features and soils, wildlife management areas, and endangered and threatened species.

A Broome County Natural Resources Inventory (NRI) was prepared in 2019 by the County's Environmental Management Council and Department of Planning and Economic Development. This inventory provides a valuable baseline for understanding the composition, quality, and distribution of the County's natural resources, including protected open spaces, biodiversity areas, water resources, and working landscapes. The NRI also provides a useful decision-making framework, helping local municipalities and community members understand how future planning, policy, management, and development decisions may impact the County's natural resources.

### BROOME COUNTY ENVIRONMENTAL MANAGEMENT COUNCIL

The Broome County Environmental Management Council (EMC) serves as a citizen advisory group to County government regarding local environmental matters. EMC's mission is to provide support to the County, conduct environmental research, raise public awareness through education, investigate sound methods of ecological planning for the County's natural resources, and respond to other environmental concerns as they occur.

Broome County recently passed the Climate Smart Communities pledge in June of 2019, and as a result, fulfilled the requirements under the NYS Department of Environmental Conservation's Climate Smart Communities Program. The County Executive appointed the EMC members to serve on the Climate Smart Communities Task Force. Through this Task Force, the County commits to continue to address areas of energy efficiency, flood resiliency, waste management, local agriculture and preservation of natural resources.



## SECTION 2.9

# NATURAL RESOURCES (CONT.)

### WETLANDS

Freshwater wetlands comprise approximately 15% (6,241 acres) of the total land and water area in the WRA. Wetlands are transitional areas between upland and aquatic habitats that are intermittently or permanently inundated and provide important habitat for a diversity of plant and animal species at all stages of life. Wetlands also provide valuable flood storage, groundwater recharge, water quality, nutrient cycling, and erosion control functions.

The conservation and restoration of wetlands are critical to ensuring the healthy function of natural systems and the provision of ecosystem services that benefit humans, such as flood control, soil stabilization, fishery nurseries, and carbon sequestration. The establishment and protection of wetland buffers are also important components of wetland conservation, as these buffers play a critical role in improving water quality and restoring natural hydrologic processes.

### National Wetlands Inventory

The National Wetlands Inventory (NWI) is a publicly available resource that provides information on the characteristics and distribution of wetlands in the United States. According to the NWI, there are approximately 6,075 acres of wetlands in the WRA. The wetlands in the WRA include the following types:

- **Riverine:** This is the most common type of wetland within the WRA. Riverine wetlands are contained within a channel linking two standing bodies of water and represent 53% (3,228 acres) of the wetlands in the WRA.
- **Emergent:** These wetlands are characterized by herbaceous plants that thrive in saturated conditions (i.e., hydrophytes) and represent 5% (282 acres) of the wetlands in the WRA.
- **Forested/Shrub:** These wetlands are characterized by woody plants and represent 17% (1,010 acres) of the wetlands in the WRA.

- **Ponds:** These wetlands are small standing bodies of water (<20 acres) that are either seasonal or permanent, and they represent 5% (288 acres) of the wetlands in the WRA.
- **Lakes:** These wetlands are permanent, large standing bodies of water (>20 acres) situated in topographic depressions or a dammed river channel, and they represent 21% (1,267 acres) of the wetlands in the WRA.

### New York State Regulated Wetlands

The NYS Freshwater Wetlands Act protects large freshwater wetlands (12.4 acres or greater in size), as well as smaller wetlands deemed locally important. A 100 foot wide “adjacent area” is established around the perimeter of every protected wetland to ensure the benefits and function of the wetland are preserved.

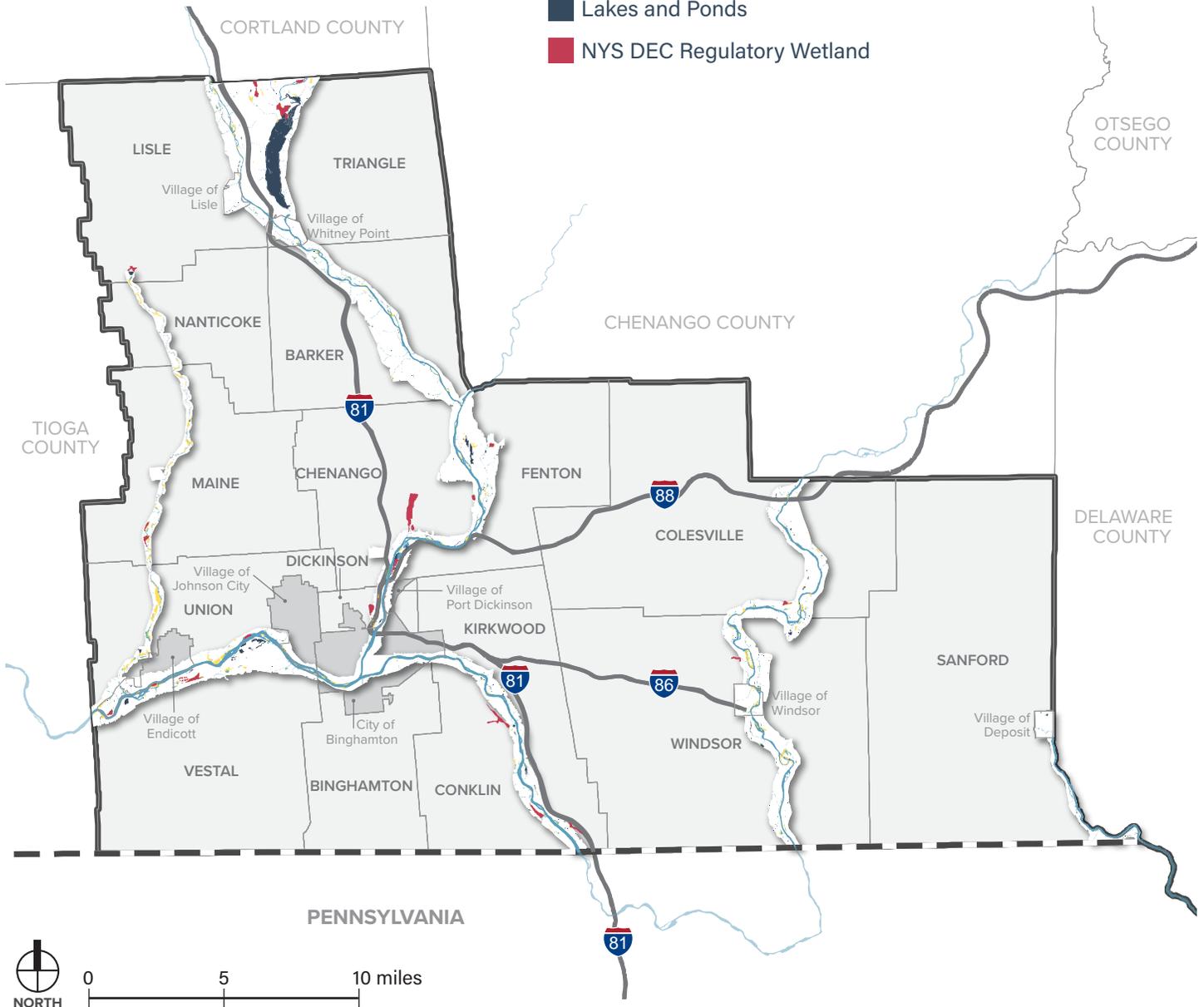
Any activity that may adversely impact a protected wetland or its adjacent area is regulated by the NYS Department of Conservation (DEC) and requires a permit. Examples of activities that would require a permit if conducted in a wetland or its adjacent area include:

- Construction of buildings, roadways, septic systems, bulkheads, dikes, or dams;
- Placement of fill, excavation, or grading;
- Modification, expansion, or extensive restoration of existing structures;
- Drainage, except for agriculture; or
- Application of pesticides in wetlands.

Approximately 370 acres of wetlands are regulated by NYS DEC within the WRA, representing 6% of the total wetland area in the WRA. Of the wetlands regulated by NYS DEC, 204 acres coincide with NWI-identified wetlands and the predominant NWI wetland type regulated by the State is forested/shrub (120 acres).

NATURAL RESOURCES: **WETLANDS**

- Riverine Wetland
- Upland/Forested Wetland
- Emergent Wetland
- Lakes and Ponds
- NYS DEC Regulatory Wetland
- Waterfront Revitalization Area



## SECTION 2.9

# NATURAL RESOURCES (CONT.)

NYS DEC regulated wetlands are located in the following municipalities:

- Town of Chenango
- Town of Colesville
- Town of Conklin
- Town of Dickinson
- Town of Fenton
- Town of Kirkwood
- Town of Lisle
- Town of Maine
- Town of Triangle
- Town of Union
- Town of Vestal
- Town of Windsor
- Village of Endicott

### CRITICAL ENVIRONMENTAL AREAS

Critical Environmental Areas (CEAs) are designated by local agencies within their designated jurisdiction, and by state agencies where the State owns, maintains or regulates the area. In order to be classified as a CEA, an area must have a unique character as it relates to one or more of the following criteria:

- Represents a benefit or threat to human health;
- Provides a natural setting (e.g., fish and wildlife habitat, forest and vegetation, open space or scenic quality);
- Encompasses agricultural, social, cultural, historic, archaeological, recreational, or educational values; and/or
- Is characterized by an inherent ecological, geological or hydrological sensitivity to change and may be adversely affected by any such change.

CEA lands are subject to regulation and protection through the NYS Environmental Quality Review process. There are two CEA's within Broome County, both of which are located in the Town of Vestal:

- The Well Field Area was designated as a CEA in 1990 due to its important function as a primary recharge area for well fields.
- The French Tract, which covers just over 8 square miles, was designated as a CEA in 1993 due to its critical role in protecting the quality of the ground water.

### GEOLOGICAL FEATURES AND SOILS

#### Geological Features

Unique geological features are defined as naturally crafted materials on earth that consist of landforms and ecosystems. Broome County is home to two of these feature types which are both located in the Village of Lisle. The first feature is classified as Creekside and is named Route 79- Lisle Fire Station. This feature includes kame terrace (glacial landform) and is situated within the northern Cutbank of Dudley Creek. The second feature, Watts Road, also contains kame terrace but is classified as a dirt road. Both of these naturally unique features are located within the WRA.

The Broome County landscape, defined by ridges, valleys, and rolling hills, was shaped over the course of hundreds of thousands of years by cycles of ice sheet formation, ice sheet melting, and receding waters carving rivers and valleys. Significant geological areas include Round Top Hill and Chenango Valley State Park.

- **Roundtop Hill:** Prior to the most recent glacial period, the Wisconsin Glacier (about 25,000 years ago), the Susquehanna River flowed through the area currently occupied by Binghamton University. Glacial activity blocked and rerouted the River to its current path just north of Roundtop Hill. When the

Susquehanna River was at its highest point, Roundtop Hill (1,340 feet about sea level) appeared to be a floating mountain in the middle of the River.

- **Chenango Valley State Park:** Lakes Lily and Lake Chenango, located in the State Park, are kettle lakes. These lakes formed when a glacier retreated, leaving two large ice chunks that melted and formed hollows, establishing the kettle lakes. As the ice melted, soil and gravel was deposited, shaping the edges of the kettle lakes and forming the hill that separates the two lakes.

## Soils

Broome County's soils were formed in part by glacial activity, which deposited the sand, gravels, very fine silts, and clays that comprise the county's soils. Alluvial sediments are concentrated in the valleys along major rivers and streams and represent some of the county's best soils for agricultural production. Poorer soil types are typically located at higher elevations and on steep slopes. Soil conservation is a key component of habitat and agricultural land preservation. Therefore, reducing the impacts of soil erosion due to flooding, deforestation, and the disturbance of steep slopes is an important part of conserving natural resources in the WRA.

## WILDLIFE MANAGEMENT AREAS

Wildlife Management Areas (WMA) are lands and waters owned by New York State and operated by the NYS DEC Bureau of Wildlife. WMAs, which include forests, grasslands, ponds, streams, wetlands, and scenic vistas, are open to the public and provide opportunities for passive recreation, hunting, fishing, and wildlife viewing

The only Wildlife Management Area within the WRA is the Whitney Point Wildlife Management Area. The management of this WMA focuses on the preservation of habitat for fishing, hunting, trapping, and wildlife viewing; more active

recreational activities — like hiking, camping, mountain biking, and cross-country skiing — are not supported.

The Whitney Point Reservoir was formed by a flood control dam on the Otselic River near its confluence with the Tioughnioga River and is managed to promote and conserve habitat for various fish species, including trout. The State Fisheries Program indicates that trout streams have special protection in New York State and the preservation of this ecologically important species at Whitney Point Reservoir is necessary to maintain and protect trout streams throughout the County.

## ENDANGERED AND THREATENED SPECIES IN THE WRA

The WRA is home to several rare plant and animal species that are protected by New York State Environmental Conservation Law.

Endangered species are defined as any native species in immediate danger of extirpation or extinction in New York or any species federally listed as endangered. While there are currently no endangered species in the WRA, peregrine falcons are listed as endangered in the City of Binghamton, immediately adjacent to the WRA.

Threatened species are defined as native species that, if current trends continue, may become endangered in the foreseeable future in New York or are federally listed as threatened. In the WRA, threatened species include bald eagles, least bitterns, pied-billed grebes, freshwater mussels (brook floater and green floater), and one species of plant.

Species of special concern are defined as those not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York. In the WRA, species of special concern include hellbender salamanders.

## SECTION 2.9

# NATURAL RESOURCES (CONT.)

Unprotected species are defined as those that may be taken at any time without limit; however, a license to take may be required. Unprotected species in the WRA include comely shiner fish, several species of dragonflies and damselflies, and the yellow lampmussel (a freshwater mussel).

For a summary of NYS listed species, organized by river and municipality, please see the following tables.

TABLE 2.13: NYS ENDANGERED AND THREATENED SPECIES IN THE WRA

Common Name	River	Municipality	NYS Listing	Notes
<b>AMPHIBIANS</b>				
<b>Hellbender</b> <i>Cryptobranchus alleganiensis</i>	Chenango River	Chenango, Fenton	<b>Special Concern</b>	-
	Susquehanna River	Colesville, Conklin*, Kirkwood*, Union, Vestal, Windsor	<b>Special Concern</b>	-
<b>BIRDS</b>				
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i>	Tioughnioga River	Barker, Lisle	<b>Threatened</b>	Nesting
	Chenango River	Chenango, Fenton	<b>Threatened</b>	Nesting
	Susquehanna River	Colesville, Conklin, Kirkwood, Union, Vestal	<b>Threatened</b>	Nesting
	Delaware River (West Branch)	Sanford	<b>Threatened</b>	Nesting & Wintering
	Otselic River (Upper Lisle Park)	Triangle	<b>Threatened</b>	Nesting
<b>Least Bittern</b> <i>Ixobrychus exilis</i>	Otselic River (Upper Lisle Park)	Triangle	<b>Threatened</b>	Nesting
<b>Pied-Billed Grebe</b> <i>Podilymbus podiceps</i>	Otselic River (Upper Lisle Park)	Triangle	<b>Threatened</b>	Nesting
<b>FISH</b>				
<b>Comely Shiner</b> <i>Notropis amoenus</i>	Nanticoke Creek	Maine	<b>Unprotected</b>	-
	Susquehanna River	Union, Vestal	<b>Unprotected</b>	-

\*historical record only

TABLE 2.13: NYS ENDANGERED AND THREATENED SPECIES IN THE WRA

Common Name	River	Municipality	NYS Listing	Notes
<b>FRESHWATER MUSSELS</b>				
<b>Brook Floater</b> <i>Alasmidonta varicosa</i>	Tioughnioga River	Barker, Triangle	<b>Threatened</b>	-
	Chenango River	Barker, Chenango, City of Binghamton, Dickinson, Fenton	<b>Threatened</b>	-
	Susquehanna River	Conklin, Kirkwood, Union, Vestal, Windsor	<b>Threatened</b>	-
	Otselic River	Triangle	<b>Threatened</b>	-
<b>Green Floater</b> <i>Lasmigona subviridis</i>	Chenango River	Barker, Chenango, Fenton	<b>Threatened</b>	-
	Susquehanna River	Colesville, Conklin, Kirkwood, Windsor	<b>Threatened</b>	-
	Tioughnioga River	Triangle	<b>Threatened</b>	-
	Otselic River	Triangle	<b>Threatened</b>	-
<b>Yellow Lampmussel</b> <i>Lampsilis cariosa</i>	Tioughnioga River	Barker, Triangle	<b>Unprotected</b>	-
	Chenango River	Barker, Chenango, Fenton	<b>Unprotected</b>	-
	Susquehanna River	City of Binghamton*, Colesville, Conklin, Dickinson*, Kirkwood, Union, Vestal, Windsor	<b>Unprotected</b>	-
	Otselic River	Triangle	<b>Unprotected</b>	-
<b>DRAGONFLIES AND DAMSELFLIES</b>				
<b>Ebony Boghaunter*</b> <i>Williamsonia fletcheri</i>	Chenango River (Chenango Valley State Park)	Fenton	<b>Unprotected</b>	-
<b>Rapids Clubtail</b> <i>Phanogomphus quadricolor</i>	Susquehanna River	Conklin*, Kirkwood*, Windsor	<b>Unprotected</b>	-
<b>Spatterdock Darner</b> <i>Rhionaeschna mutata</i>	Chenango River (Chenango Valley State Park)	Fenton	<b>Unprotected</b>	-
<b>Spine-Crowned Clubtail*</b> <i>Hylogomphus abbreviatus</i>	Chenango River	Chenango, Fenton	<b>Unprotected</b>	-

\*historical record only

## SECTION 2.10

# WATER RESOURCES

**This section focuses on water resource planning, protection, and management within and related to the WRA. Topics within this section include: water quality and pertinent state and federal regulations, source water protection, watershed planning, stormwater management, and flooding and erosion hazards.**

### WATER QUALITY

The Federal Clean Water Act requires that states periodically assess and report on the quality of waters in their state. Water quality reporting under Section 305(b) and Section 303(d) of the Act provide for ways to communicate to the public about the health of the nation's waters. Under Section 305(b), states are required to report on the quality of all waters in the state, and whether these waters are fully supporting of appropriate uses. Section 303(d) of the Act requires states to identify waters where water quality standards are not met and where uses are not supported.

In New York State the water quality assessment information used to compile the Section 305(b) Report and Section 303(d) List is maintained in a database known as the Waterbody Inventory/Priority Waterbodies List (WI/PWL). NYS DEC maintains information regarding use support and waterbody assessments in its WI/PWL. This statewide inventory of all waterbodies includes evaluations of the degree to which specific water uses in a waterbody are supported (use support) and the most current overall assessment of the water quality (waterbody assessment).

There are six Waterbody Assessment Categories:

- Impaired Waters
- Waters with Minor Impacts
- Threatened Waters
- Waters with Impacts that Need Verification
- Waters Having No Known Impacts
- Unassessed Waters

NYS DEC defines the following as designated uses:

- Water Supply Source
- Shellfishing
- Public Bathing
- Recreation
- Aquatic Life
- Fish Consumption

Although waterbody information can be updated at any time, update efforts usually focus on up to three of the major drainage basins in the State each year. This rotating basin strategy aligns with the rotating cycle used by the NYS DEC statewide ambient water quality monitoring effort and results in the review and update of the WI/PWL for all waters in the State over a five-year cycle.

There are 17 major drainage basins in New York State. Broome County falls within two of those basins: the Delaware River and the Susquehanna River Basin.

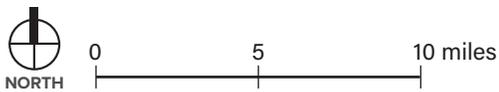
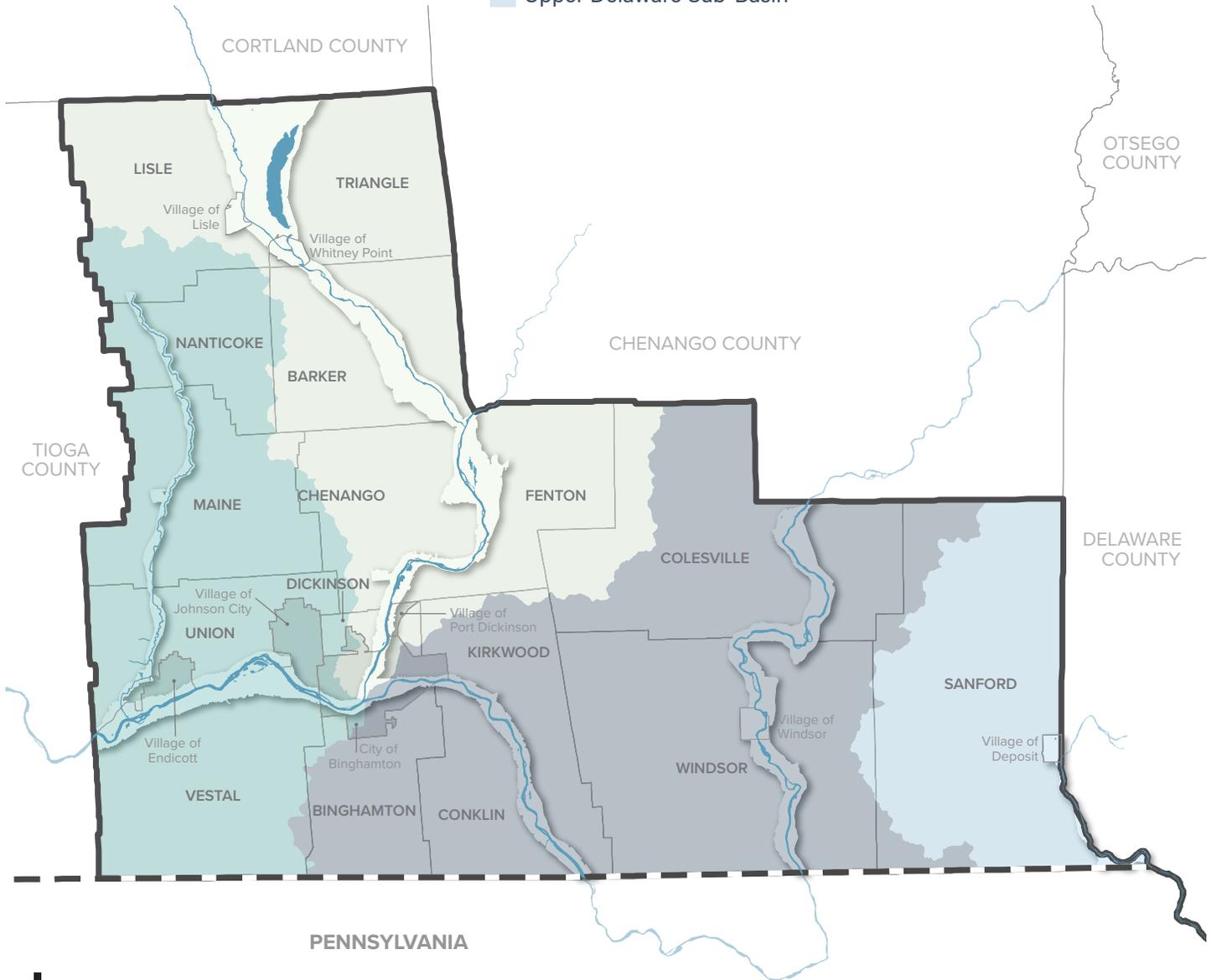
### Delaware River Basin

The Delaware River Basin has three sub-basins: the Upper Delaware River, the East Branch Delaware River, and the Middle Delaware-Mongaup. These are known as the 10-digit Hydrologic Unit Code, or HUC10 Watersheds. Broome County falls only within the Upper Delaware River Sub-Basin.

There are several waterbodies within the Upper Delaware Sub-Basin that have been designated by the NYS DEC as being impaired. Impaired waterbodies have well documented water quality problems that require restoration measures for uses to be supported. Those waterbodies are Blueberry, Laurel Lakes (10.6 Acres) and Fly Pond, Deer Lake, and Sky Lake (30.7 Acres).

WATER RESOURCES: **WATERSHED SUB-BASINS**

- Owego-Wappasening Sub-Basin
  - Chenango Sub-Basin
  - Upper Susquehanna Sub-Basin
  - Upper Delaware Sub-Basin
- Waterfront Revitalization Area



## SECTION 2.10

# WATER RESOURCES (CONT.)

### Susquehanna River Basin

The Susquehanna River Basin has many more HUC10 Watersheds within Broome County, which include Susquehanna/Choconut Creek; Otselic River; Tioughnioga River; Lower Chenango River; Middle Susquehanna River; and Lower Susquehanna River Watersheds. The following waterbodies have been designated as Impaired or with Minor Impacts within these HUC10 Watersheds:

- Susquehanna River, Lower, Main Stem, Impaired
- Minor Tribs to Lower Susquehanna (north), Impaired
- Whitney Point Lake/Reservoir, Impaired
- Dudley Creek and tribs, Minor Impacts
- Chenango River, Lower, Main Stem, Impaired
- Chenango River, Middle, Main Stem, Impaired
- Castle Creek, Lower, and minor tribs, Minor Impacts
- Susquehanna River, Main Stem, Impaired
- Beaver Lake, Minor Impacts
- White Birch Lake, Minor Impacts
- Park Creek and tribs, Impaired
- Minor Tribs to Susquehanna River, Minor Impacts
- Susquehanna River, Main Stem, Impaired

### Waterbody Classifications

New York waterbodies are assigned a “best use” classification. The best use of Class GA groundwater (all fresh groundwater in New York State is Class GA) and Class A, A-Special, AA, and AA-Special surface waters is a source of potable water supply. Separate standards for drinking water are promulgated by the New York State Department of Health (NYS DOH). SA, SB, SC, I, and SD to saline (marine) surface waters, with Shellfishing use limited to Class SA waterbodies. Public Bathing is an appropriate use in Class B and SB, as well as A, AA, SA, A-S. The remaining uses (Recreation, Aquatic Life, Fish Consumption) are expected to be supported in waterbodies of any classification. Habitat/Hydrology and Aesthetic conditions of waters may also be evaluated.

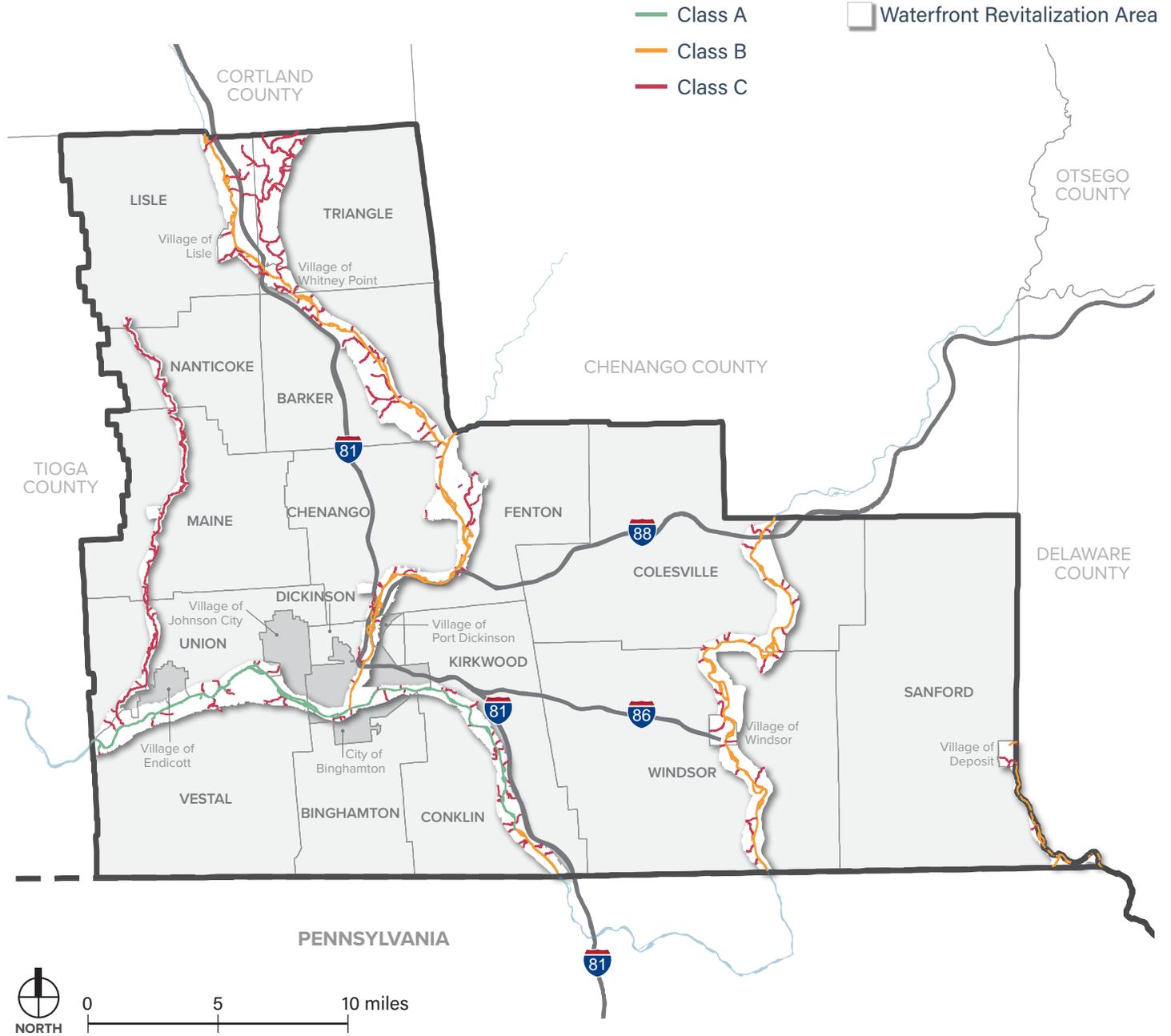
Best use classifications are:

- Class AA and A - drinking water
- Class B - public swimming and contact recreation activities
- Class C - fishing and non-contact activities
- Class D - does not support any of the uses listed above (this classification is rarely used)

Waterbodies with AA, A, B and C classifications may also have “T” or “TS” classifications, meaning they support trout populations or trout spawning.

Of the two major drainage basins, only the Susquehanna River, Lower, Main Stem and Susquehanna River, Main Stem have the Class A ranking. About 20% of water for public use in the county comes from the Susquehanna River.

WATER RESOURCES: **WATER QUALITY CLASSIFICATIONS**



## SECTION 2.10

# WATER RESOURCES (CONT.)

### OTHER REGULATED WATERS

#### Navigable Waters and Dredging

Section 10 of the Rivers and Harbors Act of 1899 applies to Navigable Waters; waters that are currently, historically, and could in the future represent opportunity for interstate commerce. All activities and structures within, above, or beneath navigable waters are regulated. There are no designated inland waterways in Broome County that are deemed Navigable Waterways.

However, Section 404 of the Clean Water Act of 1977 applies to “waters of the United States” and any discharges of dredged or fill material are regulated. The goal of the Clean Water Act is to preserve the physical, chemical, and biological integrity of surface waters and address water pollution. Waters of the United States includes Section 10 waters, in addition to interstate waters such as the Great Lakes and the Susquehanna River, tributaries, and adjacent wetlands. 401 Water Quality Certification is required by the NYS DEC. Major projects that require an environmental permit per Section 401 of the Clean Water Act in Broome County include the DOT Greenway Trail project, which will provide a pedestrian trail between Binghamton and Vestal, parallel to NYS Route 434.

#### State Underwater Lands

Underwater lands refer to areas where the harvesting of shellfish occur. There are no underwater shellfish lands that fall under State jurisdiction in Broome County.

### SOURCE WATER PROTECTION

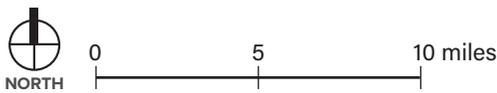
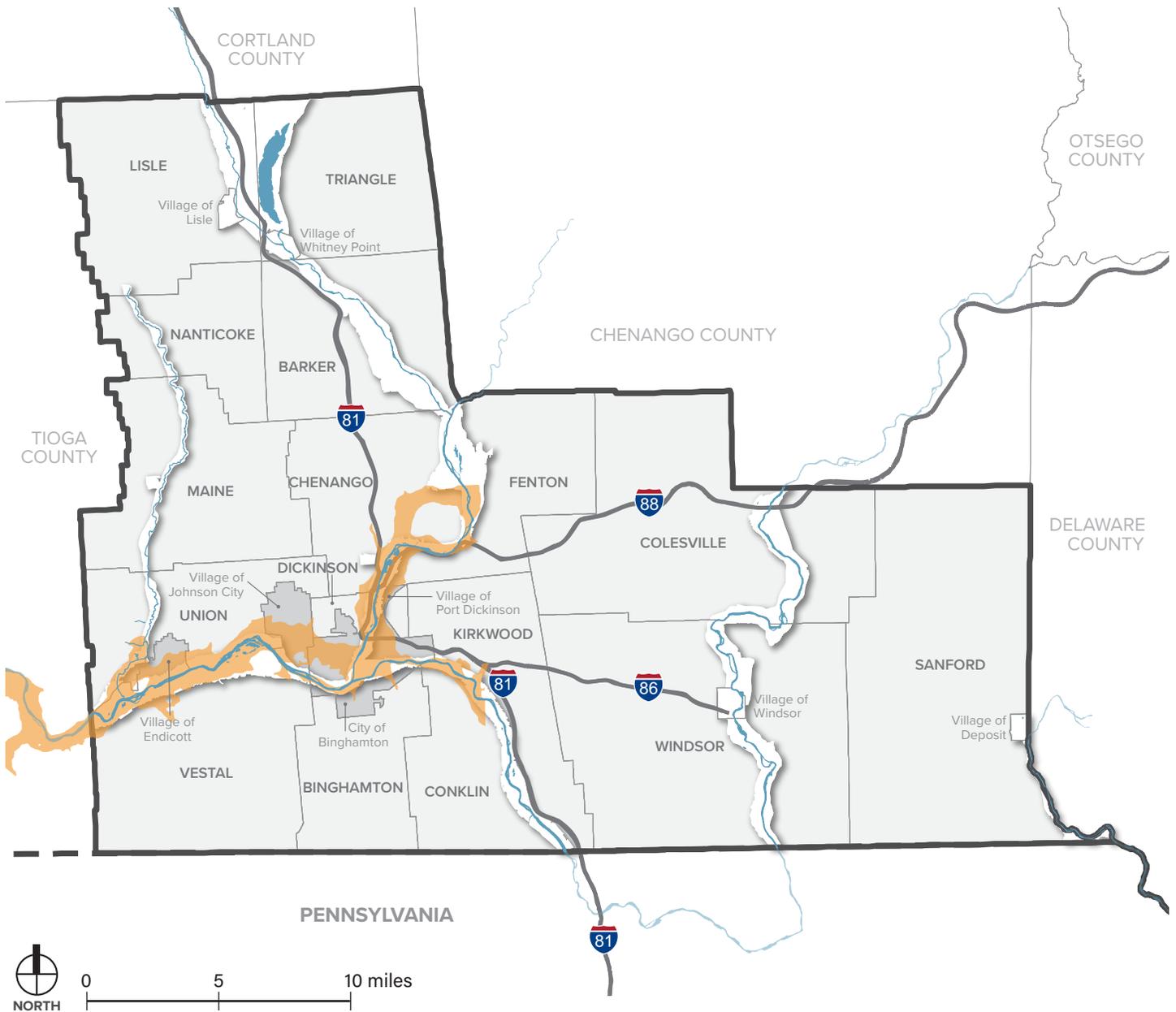
About 80% of water for public use in Broome County comes from groundwater sources. There are several aquifers located beneath the Susquehanna River, the Chenango River and their surrounding floodplains. These are referred to as unconsolidated aquifers, characterized as having frequent discharge/recharge with the streams that lie above them. Bedrock aquifers are common in rural parts of the County, which are hydrologically isolated from large streams and hold water in fractures in the bedrock.

Aquifers are classified based on importance as a public water supply, productivity, and vulnerability to pollution. Johnson City, Endwell, Endicott, Hillcrest (in the Town of Fenton) and Vestal are dependent on primary aquifers, defined by NYS DEC as “highly productive aquifers presently utilized as sources of water supply by major municipal water supply systems.”

Additionally, all of Broome County—except for a small portion in the Town of Sanford—is designated by the Environmental Protection Agency (EPA) as a sole source aquifer, known as the Clinton Street-Ballpark Aquifer System. EPA defines a sole or principal source aquifer as one which supplies at least fifty percent (50%) of the drinking water consumed in the area overlying the aquifer. These areas can have no alternative drinking water source(s) which could physically, legally, and economically supply all those who depend upon the aquifer for drinking water. The designation protects an area’s groundwater resource by requiring EPA to review all proposed projects within the designated area that will receive federal financial assistance. All proposed projects receiving federal funds are subject to review to ensure they do not endanger the groundwater source.

WATER RESOURCES: **AQUIFERS**

Primary Aquifer
  Waterfront Revitalization Area



**PRIMARY AQUIFERS**

These are highly productive aquifers currently used as sources of water supply by major municipal water supply systems, including the Villages of Johnson City and Endicott, the Town of Vestal, and the Hamlet of Endwell.

**UNCONSOLIDATED AQUIFERS**

The aquifers located beneath the Susquehanna and Chenango Rivers and their surrounding floodplains are unconsolidated aquifers. These aquifers are characterized by sand or gravel soils and experience frequent discharge/recharge with the streams that lie above them.

## SECTION 2.10

# WATER RESOURCES (CONT.)

### STORMWATER MANAGEMENT

Urban stormwater runoff has been identified in the Top Ten most prevalent causes/sources of water quality impact/impairment in the assessed waters of New York State by the NYS DEC Water Quality Assessment Program. Urban stormwater runoff is identified as a major source in 37% of all waterbodies assessed as impaired in New York State. In another 40% of impaired waterbodies, urban stormwater runoff is a contributing source (though not the most significant source). In addition, for 35% of the waters with less severe minor impacts or threats urban stormwater runoff is noted as a major contributing source of impact.

Stormwater control has become a significant NYS DEC Water Program initiative. The cornerstone of this effort is implementation of the Phase II stormwater regulations, which require permits for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s) in urban areas. MS4 refers to a stormwater conveyance or system of conveyances owned or operated by a public body (i.e. state, city, county, or district). Permittees are required to develop Stormwater Management Program (SWMP) and submit annual reports to the State. The MS4 areas, where much of the NYS DEC stormwater effort is concentrated, coincide closely with waters that are impaired and impacted by stormwater runoff.

There are 14 municipally operated MS4s in Broome County: City of Binghamton, Town of Binghamton, Chenango, Conklin, Dickinson, Endicott, Fenton, Johnson City, Kirkwood, Maine, Port Dickinson, Union, and Vestal. Broome County is identified as a “traditional non-land use MS4,” meaning that the requirements are slightly different than the other communities due to a lack of land use authority at the county level.

Along with Tioga County and the Town of Owego, Broome County and its MS4 municipalities have an intermunicipal agreement in place to work together on stormwater issues through

the Broome-Tioga Stormwater Coalition. The group works together to share information and collaborate on ways to meet the requirements set forth in state and federal stormwater regulations. This includes utilizing mapping resources, collaborating on annual reporting, working together to develop education and outreach materials, and the development of local laws and ordinances.

### FLOODING AND EROSION HAZARDS

Flooding is one of the most common natural hazards across the United States, and the Susquehanna River Basin is one of the most flood-prone regions in the nation. Flood hazards pose a significant threat to property in Broome County. Between 1954 and 2018, New York State experienced 85 flood-related Emergency Declarations or Major Disaster Declarations. Of those 85 flood-related declarations, eighteen (21%) were in Broome County. Most recently, the county experienced major floods in June 2006 and September 2011, both of which received federal disaster declarations.

#### Flood Hazard Areas

According to the Federal Emergency Management Agency (FEMA), a total of 26 square miles in Broome County lie within the Special Flood Hazard Area (SFHA). Approximately 3.7 miles of land lies in the 500- year floodplain, which includes several urbanized areas. Flood events in the county have had devastating impacts on residents and local businesses, and the endangerment of public health and safety. These impacts have also served as a detriment to recreational resources that help create a sense of identity and promote physical and passive activity. These recreational uses provide a source of historical and cultural significance to the riverfront communities that exist in the county and the amount of developed land in the floodplain serves as a hinderance to recreational facilities and assets.

FLOODING AND EROSION HAZARDS: **FEMA FLOOD HAZARD AREAS**

- 100-Year Floodplain
- 500-Year Floodplain
- 100-Year Floodplain (prelim. FEMA area)
- 500-Year Floodplain (prelim. FEMA area)
- Waterfront Revitalization Area
- Major Streams



## SECTION 2.10

# WATER RESOURCES (CONT.)

According to the 2019 Broome County Hazard Mitigation Plan, about 5.4% (24,924 acres) of the total area in Broome County lies within the Special Flood Hazard Area (SFHA). SFHA are defined as the area that will be inundated by the flood event having a 1 percent chance of being equaled to or exceeded in any given year. The 1 percent annual chance flood is also referred to as the base flood or 100-year flood. Similarly, the moderate flood hazard area (500-year floodplain) will not occur every 500 years but is an event with a 0.2-percent chance of being equaled or exceeded each year. Approximately 6.0% (27,282.8 acres) of the total area of the county lies within the 0.2-percent flood event hazard area.

### Flood Control Structures

Broome County owns and maintains 24 flood control structures that provide flood protection and mitigation measures to reduce flooding throughout the county.

Five dams occur within the Broome County WRA (a mix of federal and county ownership) at the following locations:

1. Near the headwaters of Nanticoke Creek (Caldwell East, an earthen dam);
2. On the lower reach of Nanticoke Creek in the Town of Union (an earthen dam);
3. On the Otselic River to create Whitney Point Reservoir (Whitney Point Dam, an earthen and concrete dam);
4. On the Susquehanna River, just north of the decommissioned rail bridge connecting the Town of Vestal and the Village of Johnson City; and,
5. In the Village of Deposit at Palmers Pond (an earthen dam).

## COMMUNITY RATING SYSTEM

The Community Rating System (CRS) is a voluntary program of the National Flood Insurance Program (NFIP) that encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS:

1. Reduce flood losses,
2. Facilitate accurate insurance rating, and
3. Promote the awareness of flood insurance.

Comparable to a fire rating scale, the CRS uses a Class rating system to determine the premium discount for policyholders. All communities start out with a Class 10 rating (which provides no discount), then range from 5% (Class 9) to a maximum of 45% (Class 1). As a community engages in additional CRS-credited actions, increased NFIP policy premium discounts are available.

As of August 2019, there are 1,505 communities that participate in the NFIP in New York. Of these communities, 34 (or 2%) participate in the CRS. CRS credit points are earned for a wide range of floodplain management activities, which are organized under four categories with 19 activities. The following municipalities in Broome County participate in the CRS:

- Town of Chenango (Class 9)
- Town of Union (Class 8)
- Village of Johnson City (Class 9)

The LWRS may provide opportunities for municipalities in Broome County to earn additional points towards CRS certification.



TRI-CITIES AIRPORT, ENDICOTT, NY



ENDICOTT, NY



JOHNSON CITY, NY

September 2011 Flood Event (image credits: NOAA / Bill Walsh)

## SECTION 2.10

# WATER RESOURCES (CONT.)

Flood walls and levees are also located throughout the WRA in the following locations:

- Along the eastern side of Nanticoke Creek, between NYS Roue 17C and Nanticoke Avenue;
- Along the western side of Nanticoke Creek, between River Drive and the creek;
- Along the northern bank of the Susquehanna River in the Village of Endicott, between Roundtop Park and Union-Endicott High School;
- Along the southern bank of the Susquehanna in the Town of Vestal, between Choconut Creek and McKinley Avenue (NYS Roue 26);
- Along the southern bank of the Susquehanna in the Town of Vestal, between NYS Route 17 and Willow Run;
- Along the northern bank of the Susquehanna River in the Village of Johnsons City, between William Hill Park and Little Choconut Creek;
- Along the eastern bank of the Chenango River in the Village of Port Dickinson, just north of the City of Binghamton boundary;
- Along the southern bank of Phelps Creek (a tributary to the Chenango River) in the Village of Port Dickinson, just south of the Port Dickinson Community Park;
- Along the western bank of the Tioughnioga River in the Village of Whitney Point;
- Along the western bank of the Tioughnioga River in the Village of Lisle; and,
- Along the eastern banks of the Susquehanna River, along the northern and southern banks of the Chenango River protecting the West Side, First Ward, and parts of the East Side neighborhood, and at the confluence of the Susquehanna and Chenango Rivers in the City of Binghamton.

### National Flood Insurance Program

All 24 jurisdictions in Broome County participate in the National Flood Insurance Program (NFIP). Communities participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in these communities.

### Coastal Erosion Hazard Areas

Broome County does not have any areas that fall under jurisdiction of the New York State Coastal Management Program or the Coastal Erosion Hazard Area (CEHA) Permit Program. However, streambank erosion is likely an issue for many municipalities throughout the WRA.

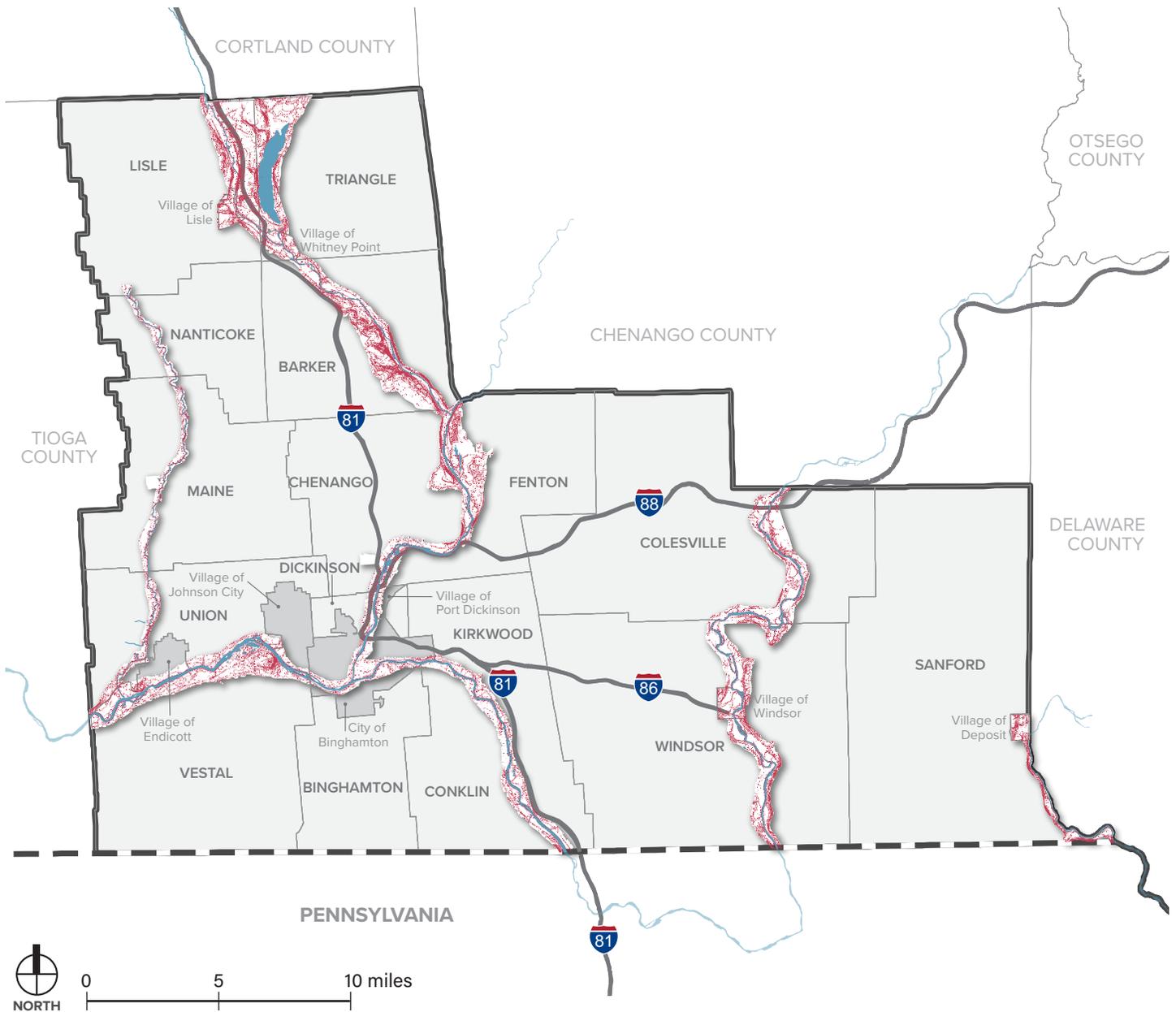
### Steep Slopes

While steep slopes are a contributing factor to the scenic and aesthetic value of a community, they also create unique challenges to development and waterfront access. Steep slopes — defined as those exceeding 20% — create public safety hazards and water quality issues, particularly when vegetation is removed, due to their unstable nature, and in turn, the increased risk for flooding, erosion, and sedimentation.

Targeted management actions should be undertaken to reduce the risks of steep slopes on the public's health, welfare, and safety. For example, zoning regulations can be used to prohibit development on steep slopes and open space planning can prioritize the preservation of natural landscapes associated with steep slopes.

FLOODING & EROSION HAZARDS: **STEEP SLOPES**

■ slopes greater than 20%    □ Waterfront Revitalization Area



## SECTION 2.10

# WATER RESOURCES (CONT.)

Steep slopes occur throughout the WRA, and are concentrated in the following locations:

- Along the Susquehanna River in the Village of Endicott;
- East of the Route 201 bridge in the Town of Vestal;
- Both sides of the Tioughnioga River in the Town of Barker;
- Around Whitney Point Lake;
- Along the eastern shoreline of the Susquehanna River from the Village of Windsor south to Pennsylvania;
- Along the western shoreline of the Delaware River.; and,
- Along the Susquehanna and Chenango Rivers in the City of Binghamton.

community, industry, agriculture, or outstanding natural resources) would occur as a direct result of dam failure. There are three High Hazard dams located in the WRA:

- Nanticoke Creek Site 9c Dam (Caldwell East)
- Palmers Pond Dam (Village of Deposit)
- Whitney Point Dam

### DAM HAZARD CLASSIFICATION

NYS DEC, through its Dam Safety Section within the Bureau of Flood Protection and Dam Safety in the Division of Water, assigns hazard classifications to dams to reflect its best understanding of the potential impacts of dam failures. The DSS assigns a hazard classification to a dam based on the best information available to it regarding conditions at the dam and its downstream area. The following classification levels are used in New York:

- Class "A" or "Low Hazard" dam
- Class "B" or "Intermediate Hazard" dam
- Class "C" or "High Hazard" dam
- Class "D" or "Negligible or No Hazard" dam

High Hazard (Class C) is a dam located in an area where failure may cause loss of human life, serious damage to homes, industrial or commercial buildings, important public utilities, main highways or railroads and/or will cause extensive economic loss. This is a downstream hazard classification for dams in which excessive economic loss (urban area including extensive



## SECTION 2.11

# RECREATION & TOURISM

### Parks in the WRA:

48 parks

### Park Acreage in the WRA:

4,634 acres

(14% of WRA land area)

### Number of Parks in the WRA with Waterfront Access:

23 parks

(~50% of parks in the WRA)

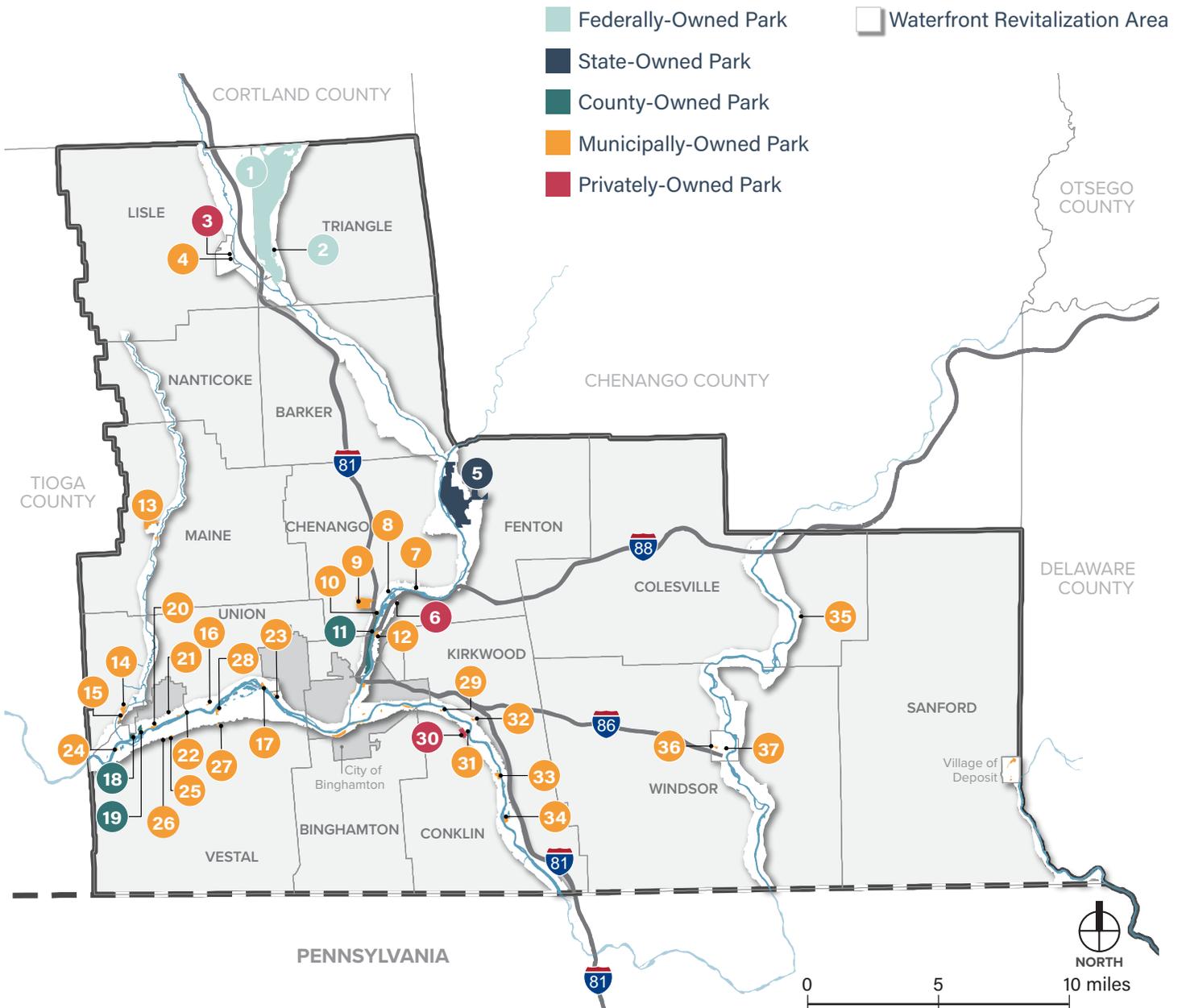
**Public parks, recreational uses, and tourist destinations are distributed throughout the WRA, providing important opportunities for residents and visitors to experience the County's diverse landscapes, cultural and recreational activities, access the waterfront, and improve health and well-being.**

Parks and recreational uses in the County are a regional destination, attracting over 2 million visitors annually. There are 36 parks located within the WRA. These parks, and their associated programming, provide diverse year-round options for all ages, including seasonal festivals, boat launches, fishing areas, playgrounds, and camp grounds. Public parks located in the WRA are described in more detail below and are organized by municipality.

## TOWN OF TRIANGLE

- **Whitney Point Lake Multiple Use Area (2,832 acres):** The Whitney Point Multiple Use area is the largest contiguous protected open space area in Broome County. This area is an important recreational and flood mitigation resource with portions of the property owned by Federal, State, and County governments. The area contains the only federally owned open space in Broome County, a US Army Corps of Engineers (ACE) flood control structure, the Whitney Point Reservoir. This reservoir is located on the Otselic River and provides flood damage reduction for the riverfronts including, the Tioughnioga, Chenango, and Susquehanna Rivers. Although the reservoir and open space area are operated and managed by New York State, Broome County Parks Department operates the recreational facilities located at Dorchester Park, located on the east side of the lake. This particular area comprises opportunities for hunting, fishing and boating. The area is primarily operated for flood control but is also used for upland wildlife management activities such as timber harvest, the construction of maintenance of small marches and nesting structures. The area extends north into Cortland County totaling 4,645 acres of which 2,832 acres are located within Broome County.
- **Dorchester County Park (53 acres):** Broome County distinguished this enjoyable county park as the small boat haven of the County. This park is located on USACE land in the Town of Triangle and is part of the Whitney Point Multiple Use Area. Due to the easy access of the launching area on the 1,200 acres reservoir, an abundance of recreational facilities

RECREATION AND TOURISM: **PARKS**



- |                                   |                                  |                            |                        |
|-----------------------------------|----------------------------------|----------------------------|------------------------|
| 1 Whitney Point Multiple Use Area | 11 Otsiningo Park                | 21 Veteran's Memorial Park | 31 Sullivan Park       |
| 2 Dorchester County Park          | 12 Port Dickinson Community Park | 22 Riverview Park          | 32 Valley Park         |
| 3 WWII Memorial Park              | 13 Maine Town Park               | 23 Boland Park             | 33 Schnurbusch Park    |
| 4 Lisle Village Pool              | 14 Glendale Park                 | 24 Castle Gardens Park     | 34 Veterans River Park |
| 5 Chenango Valley State Park      | 15 Nanticoke Creek Flood Levee   | 25 Vestal Memorial Pool    | 35 Harmony Park        |
| 6 Hillcrest Park                  | 16 Argonne Neighborhood Park     | 26 Memorial Park           | 36 Klumpp Park         |
| 7 Chenango Bridge Park            | 17 William Hill Park             | 27 African Road Park       | 37 Windsor Park        |
| 8 Broad Acres Park                | 18 Grippen Park                  | 28 Harold Moore Park       |                        |
| 9 Wolfe Park                      | 19 Roundtop Park                 | 29 Julius Rogers Park      |                        |
| 10 Otsiningo North                | 20 Mersereau Park                | 30 Conklin Sports Park     |                        |

*\*Not keyed out but mapped within the City of Binghamton: Alfred Street Park, Cheri Lindsey Park, Columbus Park, Confluence Park, Kennedy Park, MacArthur Park, Sandy Beach Park, South Side Veteran's Park, Tyler Park, Valley Street Park, and Webster Street Park*

## SECTION 2.11

**RECREATION & TOURISM** (CONT.)

TABLE 2.14: PARKS IN THE WRA

Map ID	Name	Municipality	Ownership	Acres	Riverfront
1	Whitney Point Multiple Use Area	Town of Triangle	Federal	2,832	Otselic River, Tioughnioga River
2	Dorchester County Park	Town of Triangle	County	53	Otselic River
3	WWII Memorial Park	Village of Lisle	Private	<1	None
4	Lisle Village Pool	Village of Lisle	Municipal	2	None
5	Chenango Valley State Park	Town of Fenton	State	1,028	Chenango River
6	Hillcrest Park	Town of Fenton	Private	1	None
7	Chenango Bridge Park	Town of Chenango	Municipal	7	Chenango River
8	Broad Acres Park	Town of Chenango	Municipal	<1	None
9	Wolfe Park	Town of Chenango	Municipal	142	None
10	Otsiningo North	Town of Chenango	Municipal	12	Chenango River
11	Otsiningo Park	Town of Chenango / Town of Dickinson	County	150	Chenango River
12	Port Dickinson Community Park	Village of Port Dickinson	Municipal	17	Chenango River
13	Maine Town Park	Town of Maine	Municipal	66	None
14	Glendale Park	Town of Union	Municipal	24	Nanticoke Creek
15	Nanticoke Creek Flood Levee	Town of Union	Municipal	16	Nanticoke Creek
16	Argonne Neighborhood Park	Town of Union	Municipal	4	None
17	William Hill Park	Town of Union	Municipal	13	Susquehanna River
18	Grippen Park	Village of Endicott	County	19	Susquehanna River
19	Roundtop Park	Village of Endicott	County	30	Susquehanna River

TABLE 2.14: PARKS IN THE WRA

Map ID	Name	Municipality	Ownership	Acres	Riverfront
20	Mersereau Park	Village of Endicott	Municipal	15	Susquehanna River
21	Veteran's Memorial Park	Village of Endicott	Municipal	1	None
22	Riverview Park	Village of Endicott	Municipal	6	Susquehanna River
23	Boland Park	Village of Johnson City	Municipal	6	Susquehanna River
24	Castle Gardens Park	Town of Vestal	Municipal	3	Susquehanna River
25	Memorial Park (111 Clayton Ave.)	Town of Vestal	Municipal	5	None
26	Memorial Park	Town of Vestal	Private	1	None
27	African Road Park	Town of Vestal	Municipal	4	None
28	Harold Moore Park	Town of Vestal	Municipal	15	Susquehanna River
29	Julius Rogers Park	Town of Conklin	Municipal	4	None
30	Conklin Sports Park	Town of Conklin	Private	43	None
31	Schnurbusch Park	Town of Conklin	Municipal	24	Susquehanna River
32	Sullivan Park	Town of Conklin	Municipal	3	Susquehanna River
33	Valley Park	Town of Kirkwood	Municipal	10	None
34	Veterans River Park	Town of Kirkwood	Municipal	27	Susquehanna River
35	Harmony Park	Town of Colesville	Municipal	1	None
36	Klumpp Park	Village of Windsor	Municipal	6	None
37	Windsor Park	Village of Windsor	Municipal	1	None
--	Varies	City of Binghamton	Municipal	43	Varies; Susquehanna River, Chenango River

## SECTION 2.11

# RECREATION & TOURISM (CONT.)

for both passive and active recreation are available. This beautiful waterside park offers swimming, picnicking, boating, fishing and youth ground camping. This park has a two-mile walking and biking path. Rental boats are available on site. Dorchester Park is the site of the Almost-Annual Crappie Derby, ice fishing contest, and the Annual Broome County Parks Triathlon. This park is prone to flooding.

### VILLAGE OF LISLE

- **WWII Memorial Park (less than 1 acre):** This park, which is privately owned but maintained by the Village, is situated in close proximity to the Tioughnioga River. However, it is important to note that the park does not offer direct access to the riverfront.
- **Lisle Village Pool (2 acres):** This small neighborhood children's park includes playground equipment for young children. This park was named in honor of Marie Lynch, a well-known local resident who was cherished and loved by the Village of Lisle community.

### TOWN OF FENTON

- **Chenango Valley State Park (1,028 acres):** This popular state park is located in the Town of Fenton centered around two kettle lakes, Lily and Chenango. This park features a 18-hole golf course, overnight camping and over 13 miles of trails for hiking and cross-country skiing. The River Road and Towpath Trail runs along the Chenango River for 3 miles extending northbound. The park features historic resources, such as a Civilian Conservation Corps Museum and the Chenango Canal. The park offers swimming facilities and a boat launch on the lakes, but no designated facilities for launching boats on the Chenango River.
- **Hillcrest Park (1 acre):** This privately-owned park includes two ball fields next to the Hillcrest Fire Station. These ball fields

## COUNTY PARKS PLAN

The Broome County Parks Plan was completed in 2019 by the County Parks Department to assess changing recreational needs of residents, develop goals and strategies to enhance recreational assets, prioritize future investments, and support future grant writing initiatives.

The Plan envisions a future where the County's parks, "enable all residents, regardless of age or ability, to live an active lifestyle." Further, the Plan's vision stresses the need for a variety of park types, from highly developed to serene and remote, that take full advantage of the beauty and recreational opportunities offered by the County's natural resources, and the rivers in particular.

Public surveys indicated that boating is a popular recreational activity and increased riverfront access (e.g., more boat launches) is desired in County parks. Several survey respondents also noted riverfront barriers, including concerns about pollution, limited access points, and lack of access to a boat.

County-owned parks in the WRA include Dorchester, Otsiningo, Grippen, and Roundtop Parks. All of these parks are located in the floodplain. Key recommendations for these parks include:

- Enhance placemaking, expand programming, and improve accessibility in all County parks;
- Upgrade aging facilities and address flooding in Dorchester Park;
- Increase riverfront access, rehabilitate/redevelop former ice rink, and mitigate flooding in Grippen Park;
- Provide dog amenities, install interpretive signage, address drainage issues, and allow food trucks in Otsiningo Park; and,
- Improve trails, increase riverfront access, complete scenic overlook, and install interpretive signage in Roundtop Park.

are maintained by The Hillcrest Community Association.

## TOWN OF CHENANGO

- **Chenango Bridge Park (7 acres):** This popular neighborhood park is located adjacent to the Chenango Bridge and is accessible by River Road. It includes a picnic pavilion, playground equipment, and several athletic fields. A new playground (Super Cooper Park), funded by local fundraising efforts, was recently installed in this park and additional improvements are planned.
- **Broad Acres Park (less than 1 acre):** This municipal park features a basketball court and swings.
- **Wolfe Park (142 acres):** This public park was donated to the Town of Chenango in the 1970s. The park functions as a nature preserve and features approximately 3.5 miles of hiking trails through forests and open fields and along ridgelines and creeks. The Park is also home to a scenic waterfall and gorge.
- **Otsiningo North Park (12 acres):** In partnership with the Town of Chenango, Broome County transformed this former Riverfront Park into Otsiningo North. This park offers an extensive soccer field complex, approximately 3 miles of paved trails with access to and from Otsiningo Park, providing an opportunity for visitors to seamlessly experience both parks, if desired. The riverbank is generally wooded with a few areas where the Chenango River is readily visible. Fishing is permitted along the riverbank. In 2023, the Broome County PetSafe Dog Park opened at Otsiningo North equipped with two separate fenced-in areas; one for large dogs and one

for small dogs as well amenities for dogs and humans to enjoy.

## TOWN OF DICKINSON

**Otsiningo Park (150 acres):** This historical county park is rich in cultural heritage due to its 18th century former Native American inhabitants of several Indian nations. This park is located in a central, easily accessible location that features an ADA-compliant playground, paved trails with a pond area, picnic tables and grills, open play field, softball field, several soccer fields, community gardens, and many other recreational opportunities for all to enjoy. The park is also home to numerous community events that bring thousands of visitors to the park each year including, the Broome County Regional Year-Round Farmer's Market, an annual Fall Festival, and the Spiedie Fest & Balloon Rally. The River Trail connects to the North Trail that leads to Otsiningo North Park. This park is prone to flooding and has drainage issues.

## VILLAGE OF PORT DICKINSON

- **Port Dickinson Jeanne and John D. Wifley Community Park (17 acres):** This former floodplain area was reclaimed by Village residents to create this community park. This park is located on the eastern shore of the Chenango River where the I-88 bridge crosses over the river. It features a pavilion with picnic tables, two tennis courts, a basketball court, two hand ball and ball field courts, a soccer field and restroom facilities. In 2000, the park was rededicated to former Village Mayor John D. Wifley and his late wife, Jeanne. This park is frequently used by Village residents for birthday and graduation celebrations.

## SECTION 2.11

# RECREATION & TOURISM (CONT.)

### TOWN OF MAINE

- **Maine Town Park (66 acres):** This neighborhood park is the only park located in the Town and is located directly behind Maine Memorial School. This park shares land with the Main-Endwell Central School District and Zimmer field (baseball and softball fields). The park features a summer recreation program for local youth.

### TOWN OF UNION

- **Glendale Park (24 acres):** This municipal park includes open green space, a playground and a pavilion.
- **Nanticoke Creek Flood Levee (16 acres):** This DEC owned small water body is one of 20 Broome County flood control reservoirs that were created to mitigate flood control and reduce the potential for property damaged caused by stream flooding. While technically not a park, this area is enjoyed by the public for recreational purposes. There is no boating, swimming or ice fishing allowed on flood control ponds. However, special regulations apply to trout fishing, which is restricted to shore fishing only.
- **Argonne Neighborhood Park (4 acres):** This small neighborhood park is located in the floodplain of the Susquehanna River and includes a small playground and a pavilion. This park is maintained by the Kiwanis Club of Endwell that hosts community programs as a volunteer service organization.
- **William Hill Park (13 acres):** This municipal park comprise a pavilion with picnic tables and chairs, a playground and open green space for passive use.

### VILLAGE OF ENDICOTT

- **Grippen Park (19 acres):** This County-owned park offers year-round opportunities for active recreation and is prone to flooding. This park features a baseball field, picnic tables and grills, pavilion shelter, and a float-off boat ramp that offers easy access to the Susquehanna River.
- **Roundtop Park (30 acres):** This passive park offers scenic views of the Susquehanna River Valley and is a great asset for families and individuals seeking low intensity recreation. The park is separated by a steep wooded hill from the edge of the Susquehanna river.
- **Mersereau Park (15 acres):** This municipal park runs along the Susquehanna River, west of the Endicott-Vestal bridge. The park comprises soccer and football fields, basketball courts, two playgrounds and a significant amount of open field space.
- **Veterans Memorial Park (1 acre):** Located in downtown Endicott, along Main Street, this small urban park includes several monuments honoring veterans. The park also includes a small stage area and seating.
- **Riverview Park (6 acres):** Adjacent to the McKinley Avenue (Route 26) bridge, this waterfront park includes a parking area, picnic benches, and provides access to the Chugnut Trail. A boat launch was also recently installed for kayaks and other non-motorized boats.

### VILLAGE OF JOHNSON CITY

- **Boland Park (6 acres):** This neighborhood park is located along the banks of the Susquehanna River, near the Route 201 bridge. It contains playground equipment, a basketball court, practice fields for softball and soccer, and a picnic pavilion.

## TOWN OF VESTAL

- **Castle Gardens Park (3 acres):** This municipal park includes picnic shelters, tables, playground equipment, a tennis court, a basketball court, and a small stream for scenic leisure. This park does not offer parking on-site.
- **Vestal Memorial Pool, 111 Clayton Ave. (5 acres):** This public park is adjacent to the public library, Clayton Avenue Elementary School, and Vestal Senior High School. It includes a swimming pool (Vestal Memorial Pool), two ball fields, a pavilion with picnic tables, and a large parking area.
- **Memorial Park (1 acre):** This urban pocket park includes a band gazebo, park benches, and free weekly summer band concerts. There is on-street parking available.
- **African Road Park (4 acres):** This municipal park features a picnic shelter, playground equipment, a tennis court and on-site parking.
- **Harold Moore Park (15 acres):** This neighborhood park offers a picnic shelter, tables, playground equipment, softball fields, two full basketball courts, soccer fields, a boat ramp for river access to the Susquehanna River, and restrooms. This park does offer parking on-site.

## TOWN OF CONKLIN

- **Julius Rogers Park (4 acres):** This neighborhood park features a tennis court and ball fields and is home to the Town of Conklin's T-Ball Program for the youth.
- **Conklin Sports Park (43 acres):** This park comprises one baseball and softball field, a basketball court, a picnic pavilion, a handball court and a playground facility.

- **Schnurbusch Park (24 acres):** This notable park is named after long-time Youth Commissioner, Leo Schnurbusch and is the largest park in the Town. The park is home to sport fields, a playground, sand volleyball, basketball and wall ball facilities, and the Walter Ayres Municipal Pool. This park offers swimming lessons through the YMCA and features three pavilions that are available for rent to host social events along the river. The park also comprises exercise stations near the pool area and during the summer, the Town offers a free Concert in the Park series featuring an array of musical performances.
- **Sullivan Park (3 acres):** Sullivan Park, a scenic neighborhood park features picnic areas, open green spaces, and a convenient boat ramp that provides easy access to the Susquehanna River.

## TOWN OF KIRKWOOD

- **Valley Park (10 acres):** This popular neighborhood park hosts numerous town-sporting events in the summertime. This park is frequented by walkers, joggers and runners due to paved and lighted track. This park includes playground equipment (with climbing structures, swings and slides), several playing fields (e.g. little league and softball fields, with bleachers), basketball courts, gazebo for special occasions, and on-site parking.
- **Veterans River Park (27 acres):** This municipal park is located adjacent to the Susquehanna River and includes 3 pavilions, walking trails, and a boat launch for small watercraft.

## SECTION 2.11

# RECREATION & TOURISM (CONT.)

### TOWN OF COLESVILLE

- **Harmony Park (1 acre):** This municipal park features a basketball court, picnic tables, charcoal grills and portable restrooms.

### VILLAGE OF WINDSOR

- **Klumpp Park (6 acres):** This neighborhood park includes a baseball field and a playground.
- **Windsor Park (1 acre):** This park, located along Main Street, serves as the “Village Green.” It includes a pavilion and large swaths of lawn and open space.

### CITY OF BINGHAMTON

The City of Binghamton boasts a diverse array of municipally-owned parks, ranging from small neighborhood green spaces to larger community parks with various amenities. These parks, totaling approximately 43 acres, are managed and maintained by the city of Binghamton for the benefit and enjoyment of residents and visitors alike.

Among the smaller parks, Alfred Street Park, South Side Veteran’s Park, Valley Street Park, and Webster Street Park each offer around 0.5 acres of green space, providing localized opportunities for relaxation and recreation.

Confluence Park, at 1.5 acres, is situated at the junction of the Susquehanna and Chenango Rivers, offering scenic views and waterfront access.

The city also features several mid-sized parks, such as Columbus Park (2 acres), Kennedy Park (1 acre), and Tyler Park (4 acres), which provide ample space for outdoor activities and community gatherings.

MacArthur Park, spanning approximately 8 acres, is located along the Chenango River and offers waterfront access and various recreational opportunities.

Among the larger parks, Cheri Lindsey Park and Sandy Beach Park stand out, covering over 10 acres, respectively. These expansive green spaces provide a wide range of amenities, including walking trails, picnic areas, sports facilities, and waterfront access, making them popular destinations for residents and visitors seeking outdoor recreation and leisure.



## SECTION 2.11

# RECREATION & TOURISM (CONT.)

### TOURISM RESOURCES

Broome County's waterway corridors (Nanticoke Creek, Tioughnioga River, Chenango River, Susquehanna River and West Branch Delaware River) offer unique tourism opportunities for both residents and visitors. Tourism involves the activities of people traveling to and staying in places outside of their usual environment, with experiences that include destinations, attractions, services, hotels and recreational activities. Tourism is a key asset to economic stabilization in any community. Broome County's natural waterfronts and scenic landscape defines the region's identity and has great potential to stimulate tourism growth and development. Broome County is within a five-hour drive or less of several major US cities and Toronto, Canada. Three major highways, I-81, I-88 and I-86, help to serve the County and connect its tourism resources.

Broome County is located in the Southern Region of New York (SNY) and is recognized as a tourism region by the New York State Division of Tourism (I Love NY). The SNY Region is known for its many industries, including agricultural and farming, which is vital to Broome County. Visit Binghamton (BING) is the official tourism marketing organization for the County and is located in Binghamton. BING's mission is to bring national and international business to Greater Binghamton for the economic benefit of the County, the community and its partners. BING's Convention and Visitor's Bureau encourages visitors to discover the historic, cultural and recreational attractions available throughout the County.

The County's popular attractions include West Branch Angler & Sportsman Resort, Broome County Regional Farmers' Market and Castle Gardens Park. These WRA attractions surround the waterways and provide opportunities for enhancing tourism-related assets in the Greater Binghamton region. Most WRA attractions

located outside urban areas and are primarily agritourism related, such as local family farms. Existing attractions such as cultural centers, educational institutions, water-related activities, outdoor recreation and other points of interests must be enhanced to draw more tourists to the region. The WRA attractions offer numerous amenities that support tourist trade such as restaurants, and cafes' and lodging options like camps, hotels and resorts. These services serve as an asset that support attractions within WRA communities and the Greater Binghamton Region. Existing attractions and services should focus on advancing year-round recreational and community-orientated uses of the waterfronts for ongoing tourism efforts.

The LWRS framework can help communities sustain and expand existing attractions, while generating new areas of interest for future opportunities.

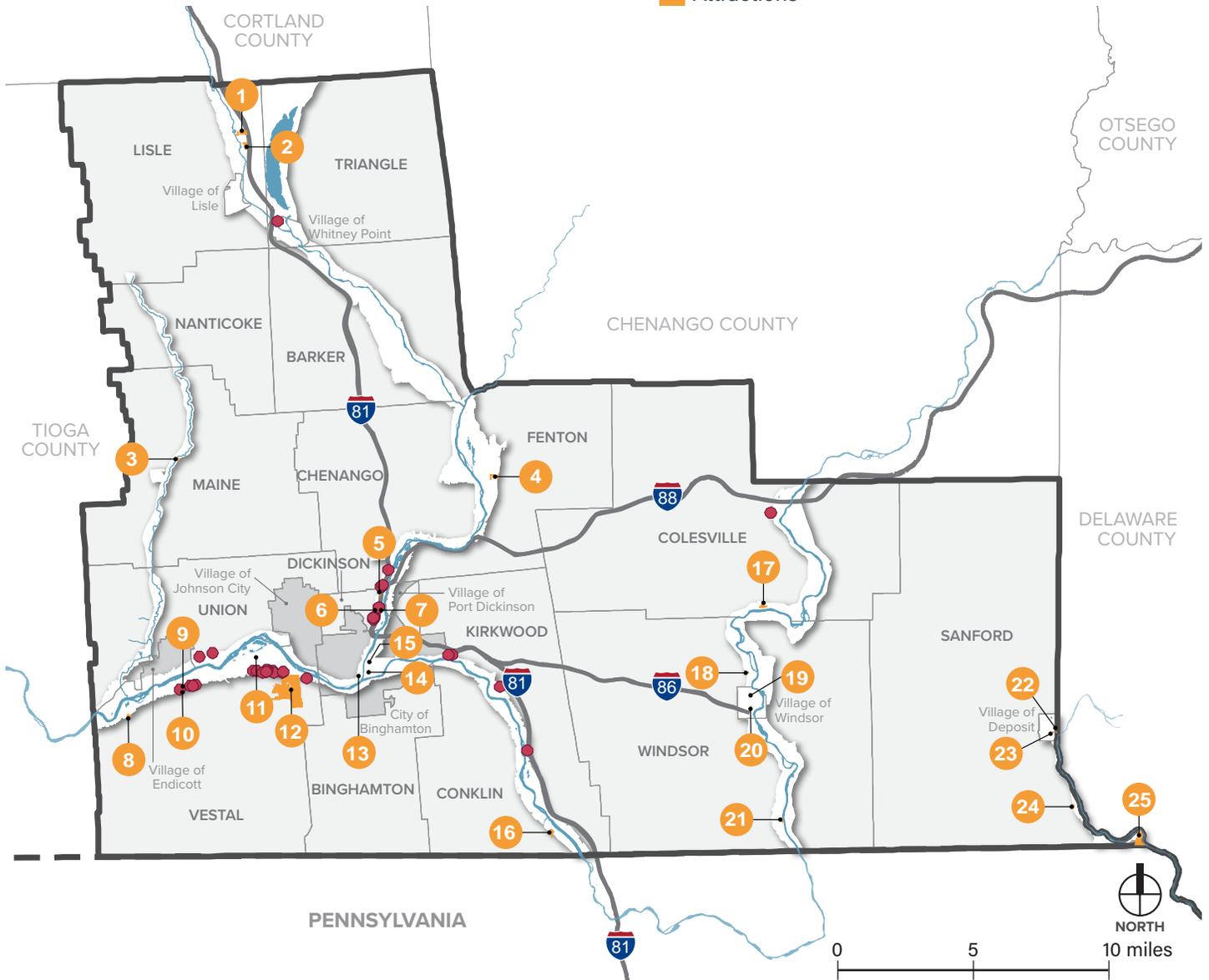
### WATERFRONT EVENTS

Various events take place along the waterfront in Broome County each year. These events are major attractions for residents and visitors and include:

- **Broome County Parks Triathlon:** annual event at Dorchester Park;
- **Almost Annual Crappie Derby:** ice fishing event in Whitney Point;
- **Riverbank Cleanup:** countywide event, typically focused on the Susquehanna and Chenango Rivers in the Binghamton metropolitan area; and,
- **Beer Tree River Float:** in the past, a popular event involved floating down the Chenango River, from Chenango Valley State Park to Beer Tree Brewery in the Town of Fenton.

RECREATION AND TOURISM: **TOURISM ASSETS**

- Lodging
- Waterfront Revitalization Area
- Attractions



- |  |                                     |  |
|--|-------------------------------------|--|
| <b>1</b> Lighthouse Landing              | <b>10</b> Vestal Museum             | <b>18</b> North Windsor Berries                              |
| <b>2</b> Hydroponic Strawberries         | <b>11</b> Skate Estate              | <b>19</b> Village Trains and Hobbies                         |
| <b>3</b> Country Wagon Produce           | <b>12</b> SUNY Binghamton Campus    | <b>20</b> Windsor Farmer's Market                            |
| <b>4</b> Miller Family Farm              | <b>13</b> Roberson Museum           | <b>21</b> Pinecrest Camping                                  |
| <b>5</b> SUNY Broome Theater             | <b>14</b> Veteran's Memorial Arena* | <b>22</b> Koo Koose Farmer's Market                          |
| <b>6</b> Broome Regional Farmer's Market | <b>15</b> Forum Theatre*            | <b>23</b> Deposit Community Theater & Performing Arts Center |
| <b>7</b> Cutler Botanic Garden           | <b>16</b> Jimay's Flea Market       | <b>24</b> Dream Catcher Estates                              |
| <b>8</b> CKster's Family Fun Park        | <b>17</b> Pumpkin Pie Farm          | <b>25</b> West Branch Angler & Sportsman Resort              |
| <b>9</b> Vestal Farmer's Market          |                                     |  |

\*County-owned

## SECTION 2.12

# HISTORIC & CULTURAL RESOURCES

### Indigenous Lands:

#### Haudenosaunee Confederacy

Onondaga Nation

Oneida Nation

### Historic Districts in the WRA:

#### 5 National Register Districts

(City of Binghamton, Town of Vestal, & Village of Windsor)

#### 1 Local Historic District

(Endicott)

### State and National Historic Register Listings:

**35 buildings, sites, and structures**

**Broome County, and the WRA in particular, are rich in indigenous, historic, and cultural resources. These diverse resources, often concentrated along the county's major waterways, are comprised of sites, structures, buildings, and natural features that contribute to the region's identity and unique sense of place.**

Broome County has a vibrant history that is rich in heritage and character. The County is home to an array of historic and cultural sites that should be protected and preserved for the future. According to the New York State Historic Preservation Office (SHPO), there are 42 individual listings on the New York State and National Registers of Historic Places in Broome County. Additionally, there are 288 archaeological surveys in the County. These resources include buildings, structures, districts, objects, and sites.

## HISTORIC CONTEXT

Upstate New York is the native land of the Haudenosaunee Confederacy (also referred to as the Iroquois), which is made up of Mohawks, Oneidas, Onondagas, Cayugas, and Senecas. The Haudenosaunee is recognized as one of the first and longest lasting participatory democracies in the world.<sup>1</sup>

Present-day Broome County overlaps with the territories of the Onondaga and Oneida nations. Two Native American settlements are well-documented within the WRA and include the Onaquaga and Otsiningo settlements.

### Onaquaga Settlement<sup>2</sup>

Onaquaga was located near present-day Village of Windsor and was an important site of interaction between Native Americans and European-Americans in the decades leading up to the Revolutionary War. Located along the Susquehanna River, just a short distance from the Delaware River, a carrying place connecting Onaquaga to the Delaware River is thought to have occurred along New York Route 17. In 1778, the 4th Pennsylvania Regiment destroyed the settlement at the request of Governor George Clinton and General Washington, as Onaquaga was being used as a base of operation for the British army.

<sup>1</sup> Haudenosaunee Confederacy. "About the Haudenosaunee Confederacy," <https://www.haudenosauneeconfederacy.com/who-we-are/> Accessed 17 March 2021.

<sup>2</sup> Hinman, M. and Elliott, D. "Onaquaga and Otsiningo," <https://www.otsiningo.com/Onoq-ots.html>. Accessed 17 March 2021.

### Otsiningo Settlement<sup>3</sup>

Located on the banks of the Chenango River in present-day Town of Dickinson, Otsiningo was home to many different ethnic groups and was largely comprised of refugees fleeing the encroachment and persecution of European settlers in southern areas. Residents of the settlement included members of the Onondaga and Oneida nations, refugee Nanticokes and Conoys from Maryland, and Shawnee from Pennsylvania. The settlement was burned and abandoned in advance of the Continental Army's arrival in 1779.

The Otsiningo settlement was "rediscovered" in the 1970s during archaeological reconnaissance for the construction of an I-81 rest station. Archaeologists uncovered several artifacts, including the footprint of a longhouse, cooking hearths and pits, and metal tools. Archaeologists returned to the site in 2013 and discovered thousands of new artifacts, helping date the settlement to 1400 A.D.

<sup>3</sup> Binghamton University Community Archaeology Program. "Native American Communities," 2019, <https://www.binghamton.edu/programs/cap/tours/otsiningo/native.html>. Accessed 17 March 2021.

### BROOME ART TRAIL

The Broome Art Trail is an annual event hosted by the Broome County Arts Council. The inaugural event was held in 2019 and included over 100 participating artists and arts organizations across 53 different venues in the county.

In 2021, the Broome Art Trail event will be held over multiple days in the fall featuring artists at indoor and outdoor venues in the City of Binghamton, Towns of Vestal and Maine, and Villages of Johnson City, Endicott, and Whitney Point. Several of the art venues are located within or immediately adjacent to the WRA, including, but not limited to:

- **Roundtop County Park** (Endicott)
- **Grippen County Park** (Endicott)
- **Endicott Visitor's Center** (Endicott)
- **Vestal Museum at the Coal House** (Vestal)
- **Janet W. Bowers Museum** (Maine)
- **Saving Grace Arts Center** (Whitney Point)
- **The Meeting Place** (Whitney Point)
- **Mary Wilcox Memorial Library** (Whitney Point)
- **Piccadilly Lane** (Whitney Point)
- **The Weathered Thread** (Whitney Point)
- **The Point Wine and Spirits** (Whitney Point)
- **Phelps Mansion Museum** (Binghamton)
- **KNOW Theater** (Binghamton)
- **Orazio Salati Studio** (Binghamton)
- **Cooperative Gallery 213** (Binghamton)
- **Roberson Museum & Science Center** (Binghamton)
- **Roberson Clayworks** (Binghamton)

## SECTION 2.12

# HISTORIC & CULTURAL RESOURCES (CONT.)

### SUSQUEHANNA HERITAGE AREA

The WRA is part of the Susquehanna Heritage Area (SHA), a large geographic area which encompasses Broome and Tioga counties and is recognized for its natural features and historic development. Created in 1982 as part of the New York State Urban Cultural Parks Program, the SHA originally included specific designated historic districts within the City of Binghamton, Village of Johnson City and Village of Endicott. In 2009, the Susquehanna Heritage Area Management Plan Amendment recommended an expanded boundary that comprised Broome and Tioga counties to better portray the story of the area. The Management Plan provides a guide for the SHA, including goals and objectives for preservation, education, recreation, revitalization, marketing and partnerships. To express the significance of the area, three interpretive themes were developed: Natural Resources and Harnessing Nature, Native Americans in the Upper Susquehanna, and Valley of Opportunities. Accomplishing an objective of the Management Plan, the Susquehanna Heritage Area has a website that connects potential visitors to destinations and attractions as well as details the overall vision. According to the SHA website, since its designation, over 50 successful Heritage Area grants totaling nearly \$5 million dollars have been awarded to projects within the existing Heritage Area communities, demonstrating the potential for preserving and enhancing the resources of the Susquehanna Heritage Area<sup>1</sup>.

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<sup>1</sup> <http://sha-ny.com/about-us>

### HISTORIC DISTRICTS

The New York State Legislature passed the State Historic Preservation Act in 1980 which established the State Register of Historic Places. Through this Act, broad range of authority has been provided to local governments to provide tools to regulate and preserve historic resources and to nominate historic resources to the National Register of Historic Places.

Municipalities have also enacted local historic preservation legislation that further identify, establish, and protect historical and cultural resources. There are four municipalities within the WRA that have local historic preservation legislation, including the Village of Endicott, Village of Johnson City, Town of Dickinson and Town of Vestal.

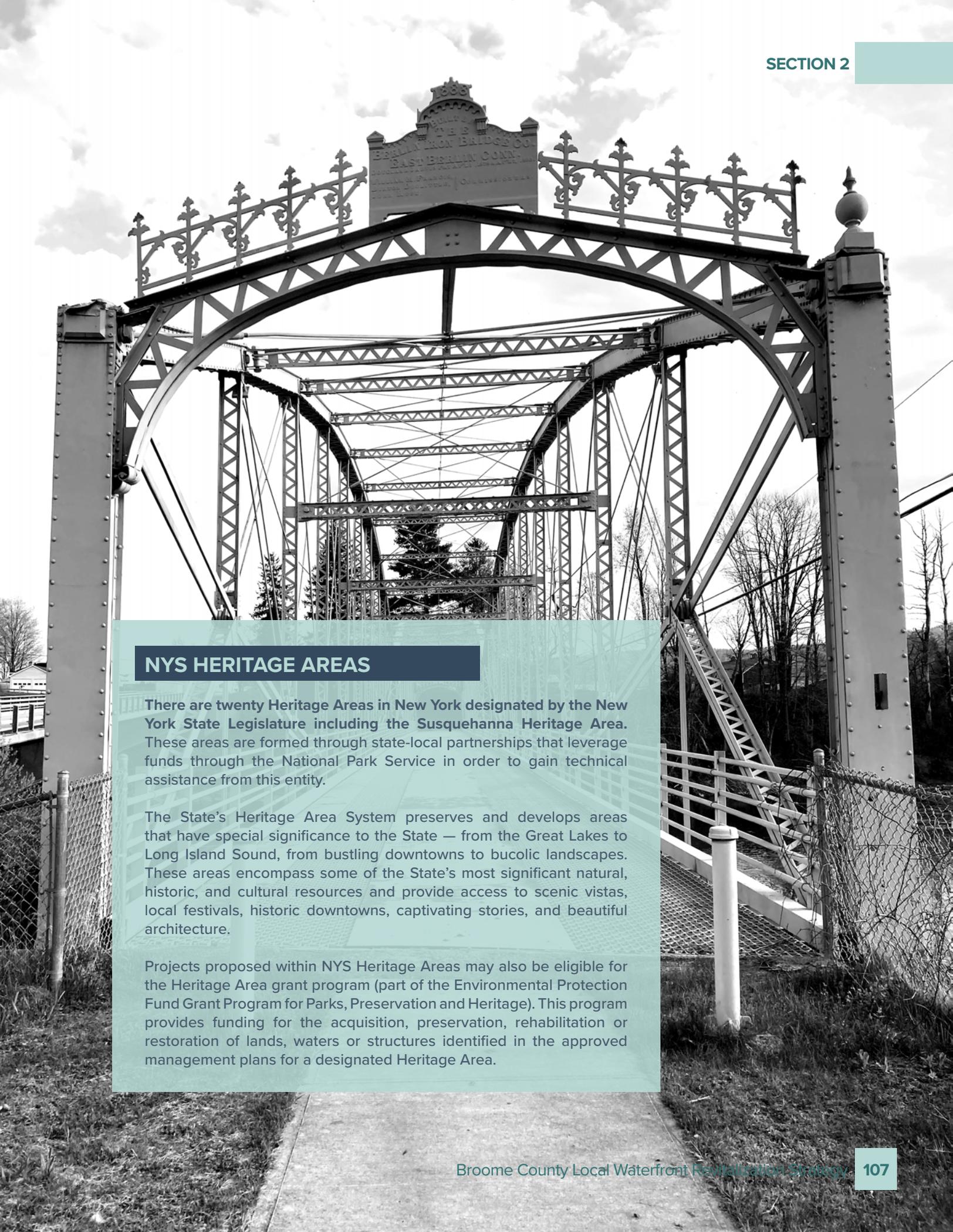
In the WRA, there are two historic districts listed on the National Register, one local historic district, and 16 sites listed on the State and National Registers of Historic Places. The following sections describe these resources in detail.

#### National Register Historic Districts

Broome County includes seven historic districts listed on the National Register. All of these districts are located along the county's river corridors, where a large amount of historic and cultural resources in the region are concentrated. Five of these seven National Register Historic Districts are located in the WRA: The City of Binghamton, Town of Vestal, and the Village of Windsor.

#### *City of Binghamton*

The Court Street Historic District encompasses a portion of downtown Binghamton and includes a variety of architectural styles from the late 19th and early 20th centuries. The district is centered around Court Street, which features several impressive government buildings, such as the Broome County Courthouse and the former U.S. Post Office and Courthouse. The area also



## NYS HERITAGE AREAS

There are twenty Heritage Areas in New York designated by the New York State Legislature including the Susquehanna Heritage Area. These areas are formed through state-local partnerships that leverage funds through the National Park Service in order to gain technical assistance from this entity.

The State's Heritage Area System preserves and develops areas that have special significance to the State — from the Great Lakes to Long Island Sound, from bustling downtowns to bucolic landscapes. These areas encompass some of the State's most significant natural, historic, and cultural resources and provide access to scenic vistas, local festivals, historic downtowns, captivating stories, and beautiful architecture.

Projects proposed within NYS Heritage Areas may also be eligible for the Heritage Area grant program (part of the Environmental Protection Fund Grant Program for Parks, Preservation and Heritage). This program provides funding for the acquisition, preservation, rehabilitation or restoration of lands, waters or structures identified in the approved management plans for a designated Heritage Area.

## SECTION 2.12

# HISTORIC & CULTURAL RESOURCES (CONT.)

includes commercial buildings, churches, and residences that showcase Victorian, Gothic Revival, and Romanesque Revival architectural styles.

The Railroad Terminal Historic District is located in the heart of Binghamton and includes the historic Erie Railroad Station, built in 1900, and the surrounding area. The station is a significant example of Beaux-Arts architecture and served as a major transportation hub for the region. The district also features several other historic buildings, such as the Perry Building, which showcases Italian Renaissance Revival architecture, and the Press Building, which exhibits Romanesque Revival style.

The State Street-Henry Street Historic District is a residential area located just west of downtown Binghamton. The district is notable for its concentration of well-preserved Victorian and early 20th-century houses, showcasing a variety of architectural styles, including Italianate, Second Empire, Queen Anne, and Colonial Revival. Many of the homes were built for the city's growing middle and upper-middle classes during the late 1800s and early 1900s, reflecting Binghamton's prosperity during that time.

### ***Town of Vestal***

The Rivercrest Historic District is located in the Town of Vestal, encompassing a long narrow stretch of land between the Susquehanna River (to the north) and Vestal Parkway (to the south). This historic district includes an intact section of the Chenango Canal extension running parallel to the shoreline and 40 contributing buildings, of which 27 are listed on the National Register. This historic district is significant in terms of its architecture (late 19th and 20th century revivals) and community planning and development. This historic district is also listed on the State Register of Historic Places.

### ***Village of Windsor***

The Windsor Village Historic District is over 550 acres in size and is located in the center of the Village of Windsor, encompassing the Village's business district and several historic residential streets. It includes 70 contributing buildings, two contributing sites (village cemetery and village green), and one contributing bandstand structure. The district is significant in terms of its architecture as well as its history related to exploration and white colonization and settlement patterns from 1800 through 1924.

### ***Thematic Historic District***

There is also one thematic National Register District in Broome County that is not geographically defined like the other National Historic Districts. This district includes six carousels donated by a prominent local shoe manufacturer, George F. Johnson, located in the City of Binghamton and the Villages of Johnson City and Endicott.

### **Local Historic Districts**

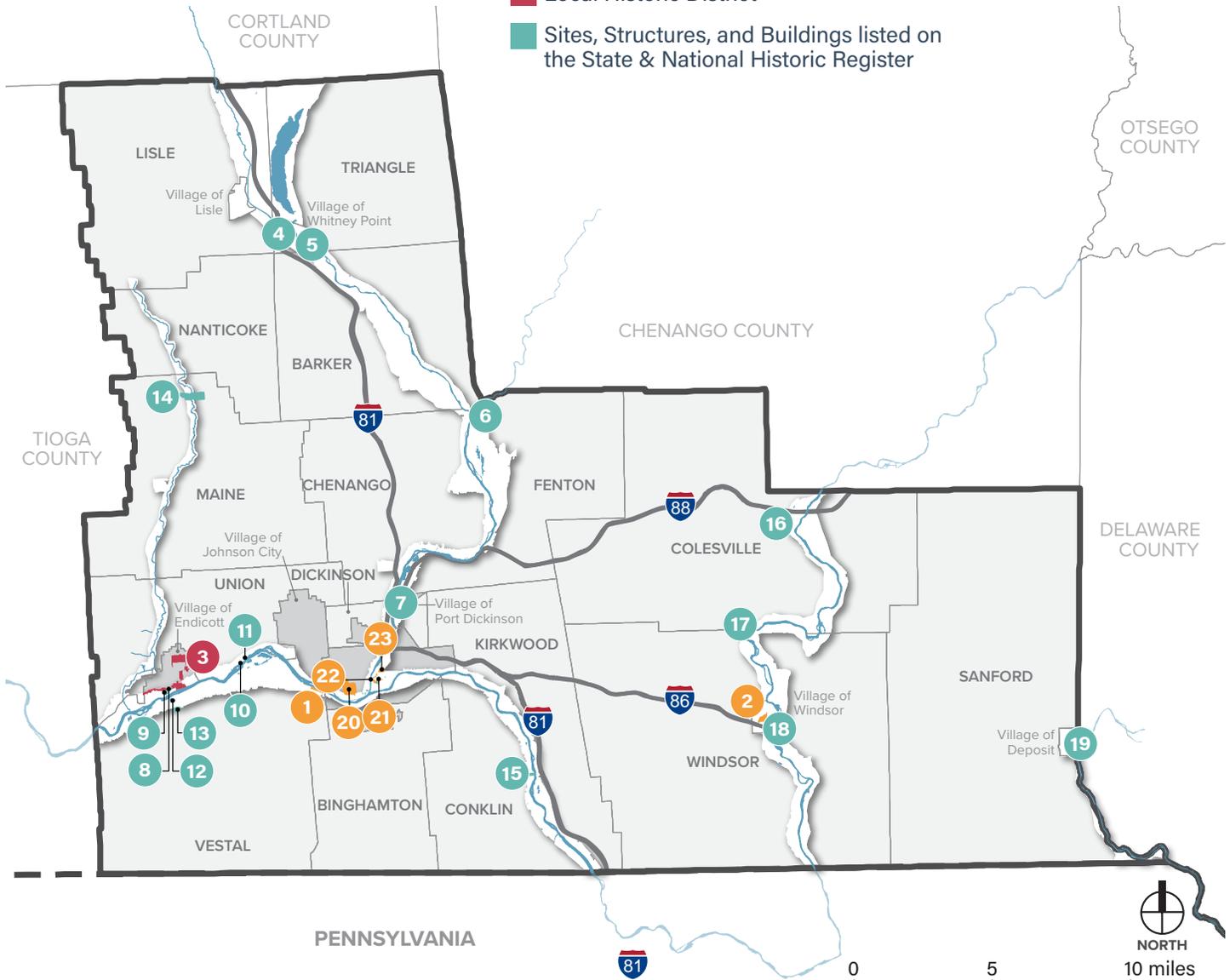
There is only one locally designated historic district in the WRA: the Endicott Historic District. This district is approximately 250 acres in size and is partially contained in the WRA. Within the WRA boundary, this local historic district includes parcels fronting E. Main Street, from the intersection of Basset Avenue (western extent) to Washington Avenue (eastern extent). In addition to the Village of Endicott's central business district and main street, this district also includes Union Endicott High School and residential areas.

## **STATE AND NATIONAL REGISTER OF HISTORIC PLACES**

The following sites, structures and buildings are listed on the State and National Register of Historic Places and are located within the WRA. These historic resources are described in detail below and are organized by municipality.

HISTORIC RESOURCES: HISTORIC DISTRICTS, SITES, STRUCTURES & BUILDINGS

- National Register Historic District
- Local Historic District
- Sites, Structures, and Buildings listed on the State & National Historic Register
- Waterfront Revitalization Area



- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #f4a460; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 1 Rivercrest Historic District</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #f4a460; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 2 Village of Windsor Historic District</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #d9534f; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 3 Endicott Historic District</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 4 Grace Episcopal Church</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 5 Henry Whitney House</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 6 Chenango Canal Prism and Lock 107</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 7 Bevier-Wright House</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 8 Endicott Square Deal Arch</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 9 Riverside Cemetery</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 10 Patterson-Hooper Family Cemetery</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 11 Washingtonian Hall</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 12 Drovers Inn &amp; Rounds Family Residence</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 13 Vestal Central School</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 14 Cyrus Gates Farmstead</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 15 Conklin Town Hall</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 16 Harpursville United Methodist Church</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 17 Ouaquaga Lenticular Truss Bridge</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 18 Jedediah Hotchkiss House</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #2e8b57; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 19 State Theatre</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #f4a460; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 20 Abel Bennett Tract Historic District (located on the edge of the WRA)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #f4a460; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 21 Court Street Historic District</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #f4a460; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 22 State Street - Henry Street Historic District</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #f4a460; border: 1px solid black; border-radius: 50%; margin-right: 5px;"></span> 23 Railroad Terminal Historic District</li> </ul> |
|---|--|--|

*\*Not keyed out but mapped within the City of Binghamton: Robert H. Rose House, Jonas M. Kilner House, Roberson Museum, South Washington Parabolic Bridge, Emmanuel Church, Trinity Memorial Church, Alfred Dunk House, Phelps Mansion, Binghamton Theater, and Binghamton Railway Company Complex*

## SECTION 2.12

# HISTORIC & CULTURAL RESOURCES (CONT.)

### Village of Whitney Point

- **Grace Episcopal Church:** This historic Episcopal Church is part of the Historic Churches of Episcopal Diocese of Central New York and was constructed in 1971. Officially listed on the National Register of Historic Places in 1998; this small wood framed church features High Victorian Gothic architecture. Additionally, the church comprise a three-stage entrance tower surmounted by a spire and small wooden cross. The final church service was held in 2013.
- **Henry Whitney House:** The Whitney House is located in a rural residential area and situated across the road from the Tioughnioga River. This two-story house is an intact representative example of an Italianate style farmhouse. It was built in 1855 and was part of a 200 acre farm that was active until the late 1960s. Since then, the surrounding farm fields have been sold and developed.

### Town of Chenango

- **Chenango Canal Prism and Lock 107:** This historic site includes four contributing structures, including the guard and dam. These structures were constructed between 1834 and 1835 for navigating the Chenango Canal. This historic resource also includes the canal prism and an adjacent tow path at Lock 107. This site and structures were added to the National Register of Historic Places in 2010.

### Village of Port Dickinson

- **Bevier-Wright House:** This prominent house reflects the early history of Port Dickinson's development along the Chenango Canal. The house features architecture reflective of the Greek- Revival style. This site was officially designated in the National Register of Historic Places in 2008.

### Village of Endicott

- **Endicott Square Deal Arch:** This arch spans Main Street, just east of the Vestal Avenue intersection, and was built in 1920 to mark the boundary between the Villages of Endicott and Union. Although the villages have since merged, the arch is still an important gateway into the Endicott-Union community today.
- **Riverside Cemetery:** This historic cemetery is located in the "Old Union" district of Endicott and is owned and operated by The Union Presbyterian Church. Established in 1791, this historically significant site is noted as the burial place of Joshua and John Mersereau who fought with George Washington in the Revolutionary War. This site was listed on the National Register of Historic Places in 2004.

### Town of Union

- **Patterson-Hooper Family Cemetery:** This historic cemetery was originally part of the Amos Patterson family farm. The first burials occurred in 1800 and 1804 with burials dating from 1800 to 1910; a majority before 1950. This site features a single large obelisk marking the center of the plot memorializing members of the Patterson family. This site was added to the National Register of Historic Places in 2008.
- **Washingtonian Hall:** Formerly known as Amos Patterson House, this historic home was listed on the National Register of Historic Places in 1996. Prominent features of this home include a two-story, five bay, center entrance, frame Federal house style that was built in 1799-1800. In 1924, this historic site was moved and remodeled in Colonial Revival Style. Other antique features include contributing structures dating to the mid-1920s including a carriage barn, small frame horse barn, pergola, brick driveway, garden house, and picket fence. The picket fence and carriage barn and horse barn were all destroyed by the 2006 flooding events.

## Town of Vestal

- **Drovers Inn and Rounds Family Residence:** This historic home and historic inn feature Greek Revival and Victorian architecture. The Drovers Inn was built in 1844 and the Rounds Family Residence was built between 1895-1912. The inn consists of a 2/1/2 story Greek Revival wood frame structure with an overlay of decadent Victorian-era decoration that was added in 1880. The residence was built in 1895 and features a tower with a bell cast roof that was added in 1912. This site was listed on the National Register of Historic Places in 2010.
- **Vestal Central School:** This historic school building, also known as Central Junior High School, was built in 1939. This site features a large three to four story, modified "U" shaped structure that is built of variegated brick over cinder block. The foundation is reinforced by concrete and includes a steel frame. The interior of the building features several Art Deco style features and the property also houses the original bus garage, built in 1950. Presently, the school is occupied by the Vestal Senior Center, Evergreen Alternative High School, administrative offices of the Vestal Central School District and a few small businesses. This site was listed on the National Register of Historic Places in 2010.

## Town of Maine

- **Cyrus Gates Farmstead:** This historic farmstead is nearly 100 acres in size and is located along Nanticoke Creek in the Town of Maine. Cyrus Gates, an abolitionist, surveyor and cartographer, constructed the Greek-Revival style farmhouse in 1848. The farmstead served as a host station for the Underground Railroad, serving one of many routes taken by those who were enslaved and seeking freedom. The host station featured a secret room and hidden panel in an upstairs

bedroom that still exists today. In addition to the farmhouse, farmstead includes several buildings and a family cemetery. The Cyrus Gates Farmstead was added to the National Register of Historic Places in 1999.

## Town of Conklin

- **Conklin Town Hall:** Originally the Alpheus Corby residence and farm, the Conklin Town Hall is located on an approximately 5 acre lot along County Route 7. The building was constructed in 1908 and is classified as late gothic revival architecture. The residence was donated to the Town of Conklin in 1944 and a small addition to accommodate offices was built in 2002.

## Town of Colesville

- **Harpursville United Methodist Church:** This small one-story church is located at the center of the Hamlet of Harpursville. The church is architecturally significant as a distinctive and intact example of early 20th century ecclesiastical architecture in Broome County.

## Town of Colesville / Windsor

- **Ouaquaga Lenticular Truss Bridge:** This historic lenticular truss bridge located in Ouaquaga spans the border between the towns of Windsor and Colesville. The bridge's composition includes two identical trusses with an overall length of 343 feet and was constructed by the Berlin Iron Bridge Company, of East Berlin, Connecticut. This bridge was listed on the National Register of Historic Places in 2003. In 2008, the bridge was closed to vehicular traffic and replaced with a new bridge built adjacent to it. The original historic bridge is still open to the public for non-motorized uses.

## SECTION 2.12

# HISTORIC & CULTURAL RESOURCES (CONT.)

### Village of Windsor

- **Jedediah Hotchkiss House:** This historic home, also known as Old Stone House, was built in 1823. This two-story dwelling features a gable roof constructed of squared creek and fieldstone. This site was the birthplace of educator and American Civil War cartographer Jedediah Hotchkiss. This site was listed on the National Register of Historic Places in 1982.

### Village of Deposit

- **State Theatre:** The theatre, located at 148 Front Street, is an important component of the Village's small, but densely developed downtown. Today, the theatre is a fragment of a much larger building that was completed in 1937. In 1986, following a winter storm event, the auditorium collapsed due to the weight of the snow. The auditorium was rebuilt in the same footprint with the same materials beginning in 1988. The theatre features a large trapezoidal marquee that extends over the sidewalk and is topped with lighted letters spelling "STATE" on either side. Decorative features are simple and reflect an art deco style.



## SECTION 2.13

# SCENIC RESOURCES

**Broome County is home to an array of scenic resources, which are defined as compelling visual experiences that may occur along waterways, roadways, or when visiting local parks, conservation areas, recreation areas, and/or natural areas.**

Public access to scenic viewsheds is one way to create memorable experiences for visitors and residents and enable everyone to experience the beauty and diversity of the county's natural resources.

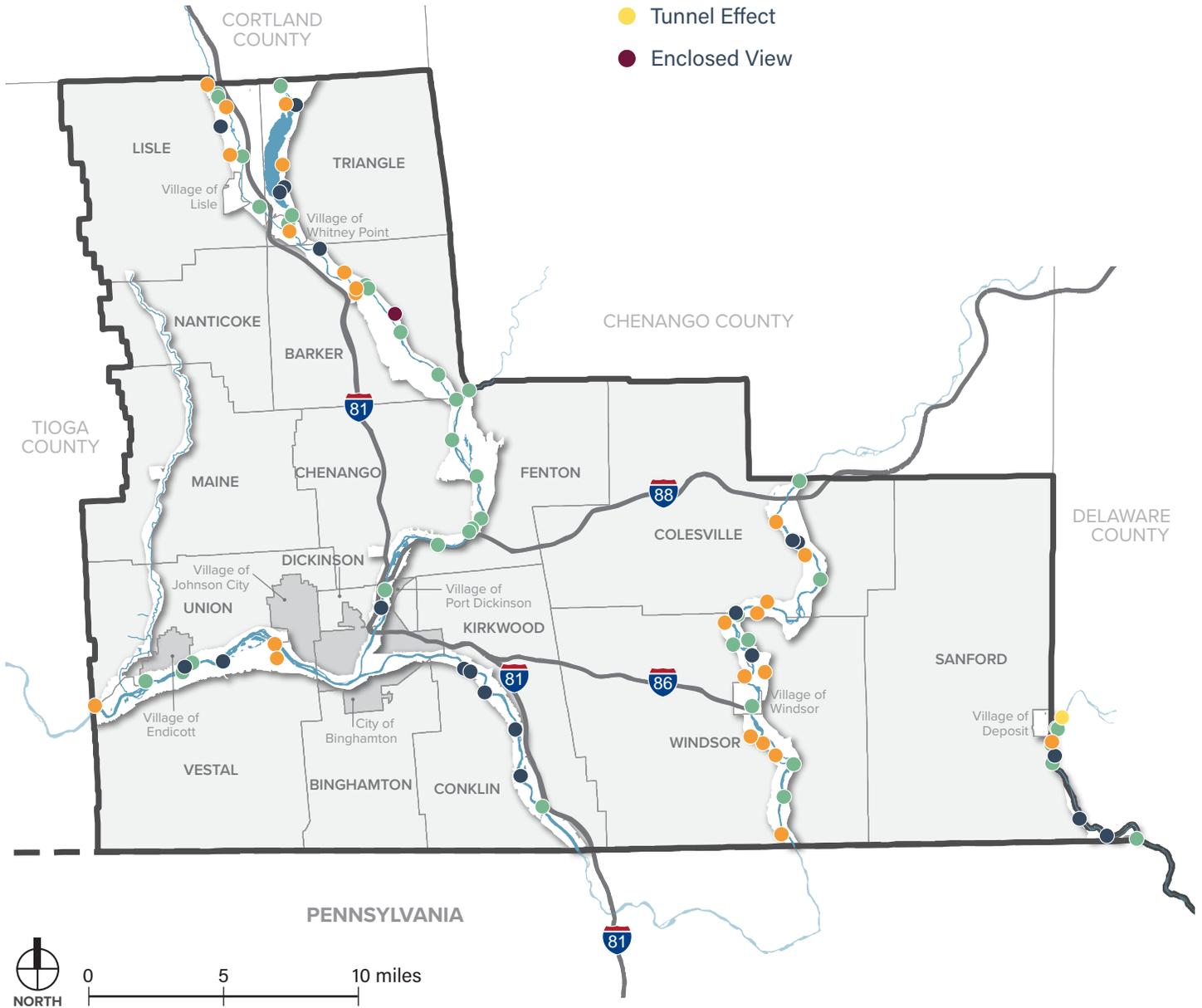
Scenic resources are located in nearly every WRA municipality and include overlooks along rural roadways, panoramic views from hilltop summits, distant views down river corridors, and framed views of historic and natural resources. Scenic resources located throughout the WRA are mapped on the next page.



**Images from top to bottom:** Ouaquaga Bridge over the Susquehanna River in the Town of Windsor; panoramic views of the Susquehanna Valley in the Town of Windsor; panoramic views of the Chenango River from Port Dickinson Community Park; Roundtop Park overlook

NATURAL RESOURCES: SCENIC RESOURCES

- Overlooks
- Panoramic Views
- Distant Views
- Tunnel Effect
- Enclosed View
- Waterfront Revitalization Area



## SECTION 2.14

# INFRASTRUCTURE

**Large-scale infrastructure systems provide important public services throughout the County and WRA. Ensuring these facilities are resilient to future change and adequately meet the needs of the communities they serve and future development is critical. This section provides an overview of wastewater treatment facilities, water supply, solid waste disposal, and energy generation and transmission in the WRA.**

## WATER

### Wastewater Treatment Facilities

There are approximately 102 wastewater treatment facilities within the WRA. Wastewater consists of both domestic and sanitary wastewater. These wastewater types come from residential sources with the major concerns including disease, industrial wastewater, discharged by manufacturing process and commercial enterprises and other waste products. Wastewater treatment is an essential process that cleans and protects water. This crucial treatment ensures that waste products do not reach local waterbodies, forming public health and safety concerns and water quality issues.

Broome County's wastewater treatment plants primarily serve the metropolitan area with the exception of the eastern part of the County. There is a total of ten wastewater treatment plants located in the County, the Binghamton-Johnson City Joint Plant having the largest capacity. Other wastewater plant locations include; the Village of Endicott, Town of Chenango, Village of Deposit, Town of Sanford, Town of Windsor, Town of Fenton, and Village of Whitney Point. All of these plant locations are within the WRA boundary. Wastewater treatment facilities need to have proper planning and decision making to ensure the plant's capacity to discharge large volumes of wastewater is necessary community growth. The Binghamton-Johnson City plant, which services a large portion of the region and

has a system with several Combined Sewer Overflows (CSOs) dealt with major treatment issues for numerous years. CSOs collect runoff, domestic and industrial wastewater in the same pipe. Major issues for this CSO included excess overflow of water during period of heavy rainfall and a lack of upgraded systems that followed State and Federal regulations. To address this issue, the Binghamton-Johnson City Joint Sewage Treatment Plan (B-JC STP, 2012) was developed and within the Plan, the Flow Management Plan was completed in a response to a 2007 Consent Order from DEC. The primary purpose of the Flow Management Plan was the creation of a program that manages wet weather wastewater flow that makes sure levels do not exceed the treatment capacity of the plant in the future.

Private septic systems are the primary method for sewage disposal in more rural and suburban parts of the County. The Broome County Health Department permits, monitors and documents all new and replacement septic systems to ensure they function according to the Broome County Health Code. A faulty septic system can cause impairments to water quality and aesthetics. Violations due to faulty septic system are regulated by the Health Department who ensures that these systems are brought back up to code.

### Water Supply

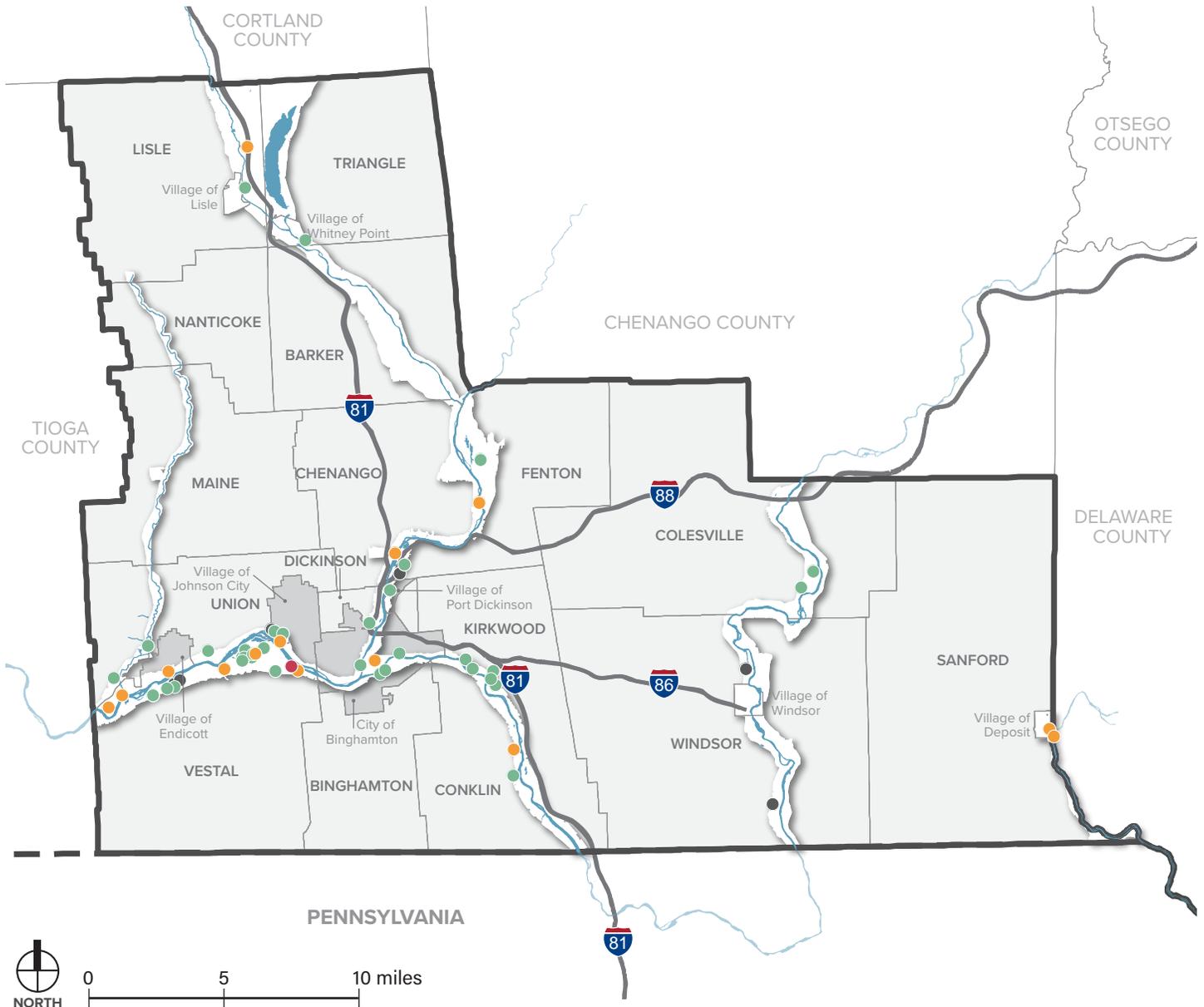
Approximately 80% of Broome County residents rely on groundwater as their only source of potable water, according to the County Department of Planning and Economic Development. Most municipalities in the County own, operate, and maintain wells to provide residents with drinking water.

The Susquehanna River is the source of drinking water for the City of Binghamton, the Town of Binghamton, the Village of Port Dickinson, and part of the Town of Dickinson.

TRANSPORTATION: **WASTEWATER TREATMENT FACILITIES**

- No Violation
- Noncompliance
- Significant Violation
- Unknown

□ Waterfront Revitalization Area



## SECTION 2.14

# INFRASTRUCTURE (CONT.)

### SOLID WASTE DISPOSAL

Broome County owns and operates a landfill that serves County residents. The landfill is located north of the Greater Binghamton Airport and is not within the WRA.

### ENERGY PRODUCTION AND TRANSMISSION

According to the Regional Energy Infrastructure Assessment and Strategy completed by the Southern Tier 8 Regional Board in 2020, Broome County's estimated annual electricity usage is 1.5 million MWh; 48% of this electrical usage is generated by residential uses, 36% by commercial uses, and 16% by industrial uses. The County's estimated annual natural gas usage is 8.2 million cubic feet. Similar to electrical usage, residential uses consume a majority (62%) of the total natural gas used in Broome County, while commercial uses (28%) and industrial uses (10%) consume a smaller proportion.

A majority of the electricity consumed in Broome County is generated at large power plants located outside of the Southern Tier — including nuclear power plants in Oswego and Ontario and hydroelectric plants near Niagara Falls and in Massena — and transmitted to customers via large-scale electrical transmission and distribution networks.

In addition to the electricity generated at large power plants, Broome County owns two electrical generation facilities located at the County landfill. These facilities convert methane emitted from the landfill into electricity and are operated by New York Gas & Electric (NYSEG). Approximately 600 MWhs are produced annually and are provided directly to the County to power operations.

The Regional Energy Infrastructure Assessment and Strategy notes that the electrical grid will become more decentralized to accommodate renewable energy in the future and that former generating plants will play an important role in this transition, given their existing infrastructure and connections to the electrical grid. Within the WRA, the Westover generation plant, located in the Town of Union, closed in 2013. This former coal-fired power plant consisted of three coal-fired boilers that provided steam to two turbine generators with a generating capacity of 119 MW.

### Renewable energy

According to the Regional Energy Infrastructure Assessment and Strategy, 347 solar power projects have been implemented throughout Broome County, producing approximately 11,700 MWh annually. Just west of Schnurbusch Park and the WRA boundary in Conklin, the largest clean energy project in the county, a 5.2 MW solar array, was installed in 2018. This solar facility is expected to save the County \$140,000 per year in electricity costs and offset the energy equivalent of over 550 homes in its first year of production.

Currently, 23 solar projects are proposed across Broome County and once complete would generate an additional 15,090 MWh annually. While not located in the WRA, a large, 124 MW capacity wind farm is also proposed in the Towns of Windsor and Sanford (Bluestone Wind), and construction of this project has already begun.

Within the WRA, the Federal Energy Regulatory Commission recently issued a preliminary permit to study the feasibility of constructing a 6 MW hydroelectric project at the Whitney Point Dam, which is owned by the US Army Corps of Engineers. If constructed, the project is estimated to generate 24,000 MWh annually.

### Microgrids

Microgrids are local energy grids with the ability to disconnect from the traditional electrical grid and operate autonomously. The Regional Energy Infrastructure Assessment and Strategy identifies Broome Community College as a potential site to host a microgrid. The community college is partially contained within the WRA and the generating capacity of its combined heat and power facility may be able to support a microgrid to benefit the surrounding community.

### Utilities

NYSEG serves most electricity and natural gas customers in Broome County. In addition to NYSEG, the Endicott Municipal Electric Utility serves 3,250 customers in the Village of Endicott, and Leatherstocking Gas, a municipal franchise, serves the Town and Village of Windsor.



**Broome County Solar Farm** in Conklin, NY. (image credit: WNBF)

## SECTION 2.15

# TRANSPORTATION

**Transportation systems provide critical services to support access and mobility within a community. Transportation systems include the highway and roadway system, as well as other transportation options via public transportation, rail, air, boat access, and bike and pedestrian connections, such as trails. Broome County is home to multiple transit networks that connect riverfront communities on a greater scale (locally, regionally, nationally), including the WRA.**

### ROADWAYS

#### Major Roads

The road system in Broome County includes Interstate Highways, US Routes, NY State Routes, arterial roads and local roads. These roadways comprise of maintenance jurisdiction by municipalities, Broome County, NYS Thruway Authority or NYS Department of Transportation. The major arterial road within Broome County is Interstate 81, which extends from the New York State Thruway serving the cities of Binghamton, Syracuse, and Watertown. The freeway runs north-south through Central New York and crosses the Pennsylvania state line southeast of Binghamton providing easy access throughout the County and City of Binghamton. The WRA boundary encompasses Route 81 from the north, near Whitney Point between the Tioghnioaga River and Whitney Point Reservoir. Additionally, this route includes north of Port Dickinson, on the western side of the Chenango River. Slightly east, Route 81 follows the northern border of the Susquehanna River in the southeasterly direction of the City.

The municipalities that about I-81 include:

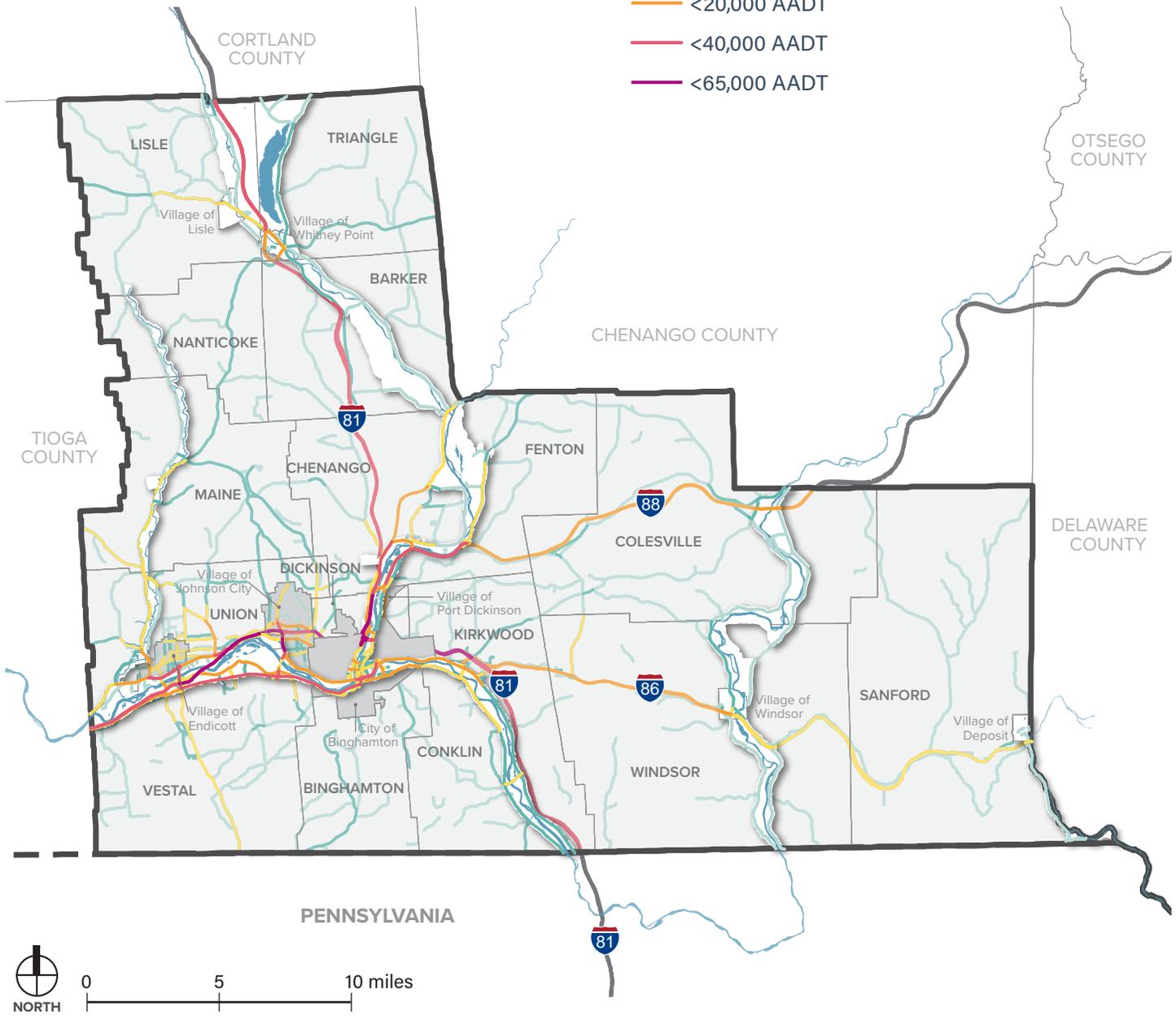
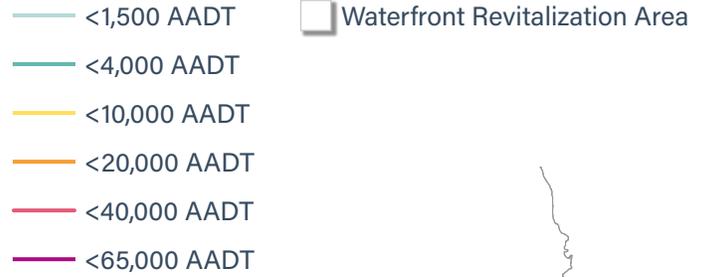
- City of Binghamton
- Town of Barker
- Town of Chenango
- Town of Conklin
- Town of Dickinson
- Town of Fenton
- Town of Kirkwood
- Town of Maine
- Town of Triangle
- Village of Endicott
- Village of Lisle

Several NY State Roadways provide direct access to communities within the WRA. Interstate 88 provides access from northern New York State into the Town of Fenton where the interstate splits and becomes NYS Route 7 or Interstate 81. US Route 11 is a major arterial in and around the City of Binghamton beginning north of the City turning east towards the adjacent Town of Kirkwood, Town of Dickinson, and ending at the Town of Colesville. Interstate 86 intersects with Interstate 81 at the Town of Kirkwood dispersing into the Town and Village of Windsor as I-81 continues southwards

### TRANSPORTATION SYSTEM PLANNING & MANAGEMENT

The Binghamton Regional MPO is responsible for transportation planning in the metropolitan area including BC Transit and BC Country public transit bus service and Para Transit service. BMTS is responsible for transportation planning for 21 cities, towns, and villages in the urbanized area. The BMTS includes not only the urban core of Binghamton, Johnson City, Union, Dickinson, Vestal, Fenton, Chenango, and Endicott, but also suburban areas stretching from west of the Town of Owego to Chenango Bridge, Conklin, and Kirkwood. The total planning area covers approximately 678 square miles encompassing all the municipalities within the WRA.

TRANSPORTATION: **ANNUAL AVERAGE DAILY TRAFFIC (AADT) VOLUMES**



## SECTION 2.15

# TRANSPORTATION (CONT.)

towards the Town of Conklin.

Locally known as Vestal Parkway, NYS Route 434, runs parallel to the Susquehanna River. The Washington Street Pedestrian Bridge is the approximate point where Route 434 becomes NYS Route 7. NYS Route 7 starts north of the City of Port Dickinson moving south, crossing the Susquehanna River merging with Route 434 towards the City of Binghamton, approaching the southern border of the Susquehanna River. A major utilized roadway, NYS 434 carries a significant portion of traffic between the City and all communities to the west. All of the roadways mentioned above fall into the WRA boundaries.

Within the WRA, the State Highway System Annual Average Daily Traffic Count (AADT) is between 4001-75000, indicating a relatively moderate to high traffic pattern in roadway areas, I-81, I-88, I-86 and Route 17. According to the U. S Department of Transportation/ Federal Highway Administration's GIS web application the most up to date AADT is provided for the year 2019. The Town of Kirkwood (62,096), The Town of Union, and The Town of Dickinson (58,787) have the highest AADT count which indicates the highest travel traffic patterns within the WRA. The City of Binghamton and Town of Barker roadway I-81 and the Town of Vestal's main roadway, Route 17's AADT count range from 25,000-50,000 indicating a low to moderate AADT count within the WRA.

The majority of roads within the WRA are considered local roads which are owned and maintained by individual municipalities. These roads provide multiple means of access to the waterfront areas. Local roads provide access to the Chenango River (east- west) or Susquehanna River (north-south) along with the Tioughnioga River in the (north-west) Otselic River (north) and West Branch Delaware River (south-east).

## BRIDGES

Bridges provide critical connections across the County's diverse waterways, linking municipalities and increasing mobility. Several of the bridges in Broome County, and within the WRA in particular, are also cultural attractions. For example, the Oauquaga Bridge in the Town of Windsor is a historic lenticular truss bridge that is listed on the National Register of Historic Places. Although this bridge is now closed to vehicular traffic, it remains open as an important connection across the Susquehanna River for pedestrians and cyclists.

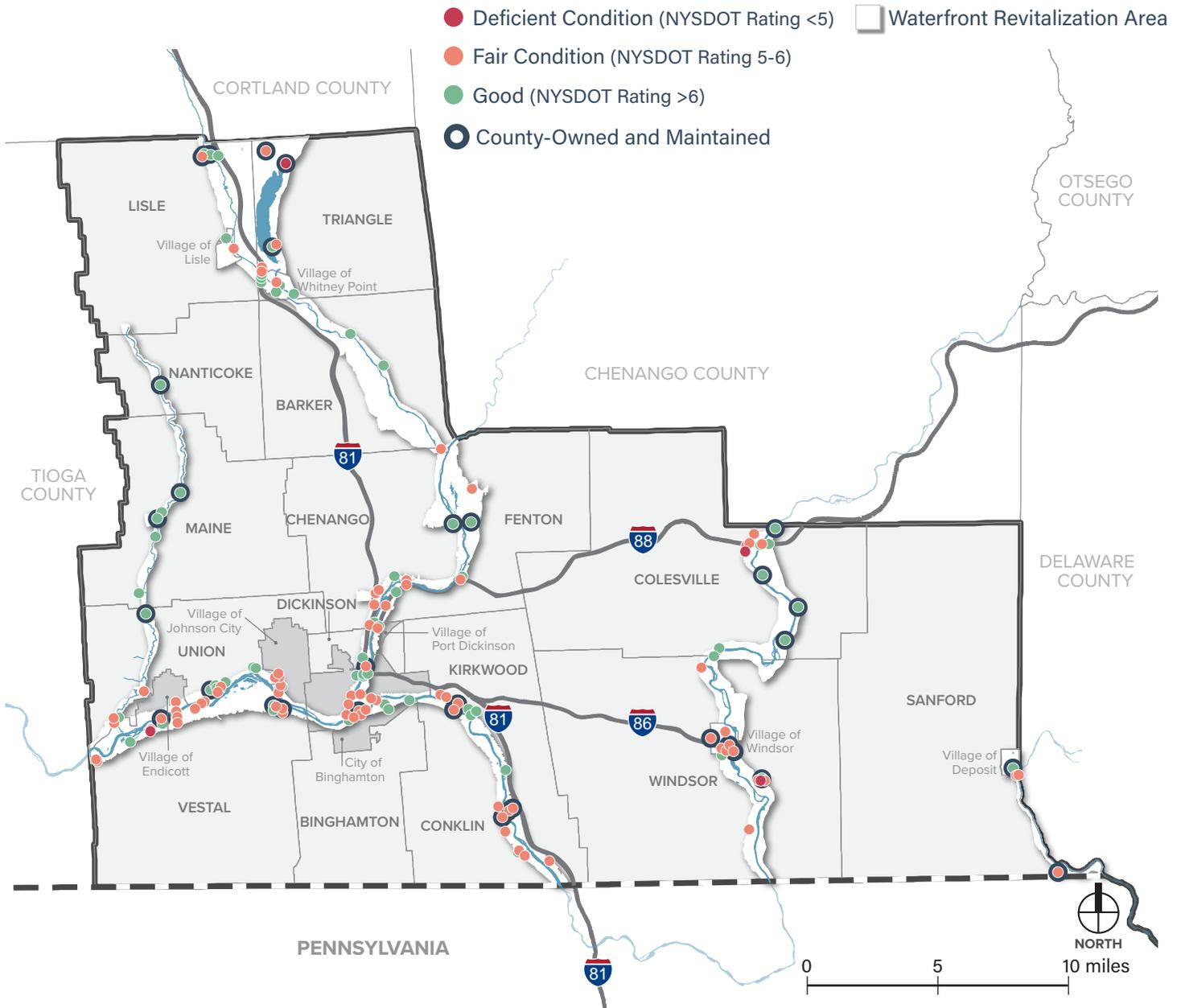
Bridges can also pose an array of challenges. Bridges require significant maintenance, which if deferred, can be costly. They also represent pinchpoints in the transportation network, especially in areas where river crossings are limited, and may contribute to traffic congestion. And, in addition to being susceptible to flood events, bridges can also amplify flood hazards by causing ice jams or trapping debris and obstructing water flows.

Within the WRA, there are 177 bridges. A majority (93%) of these bridges are in good (NYSDOT condition rating over 6) and fair condition (NYSDOT condition rating 5-6), while 2% are in bad condition (NYSDOT condition rating less than 5) and in need of repair.

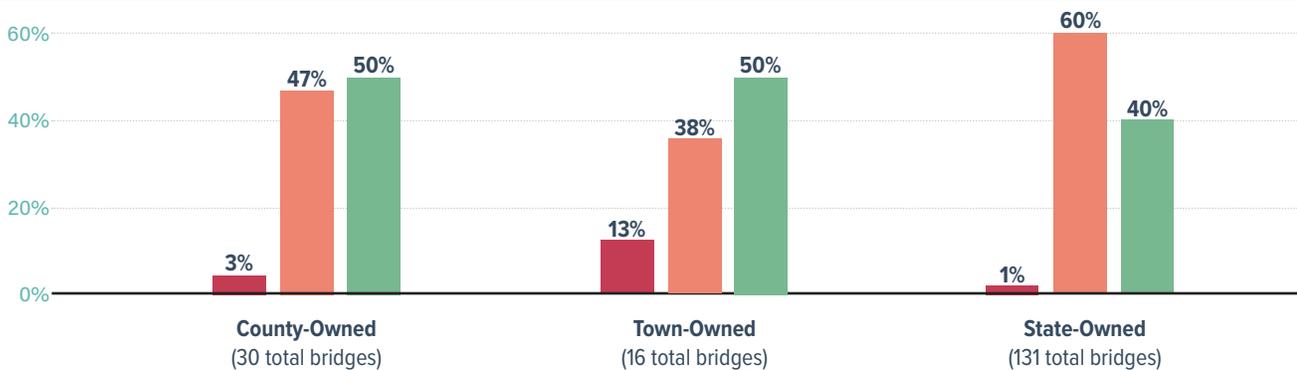
Of the 177 bridges in the WRA, 30 are county-owned and maintained. A majority of the county bridges are in good condition (50%).

Bridges are concentrated in developed areas along the lower Susquehanna River, the lower Chenango River, and in the Villages of Whitney Point and Windsor. In some of the more rural municipalities, bridges are limited. For example, there is only one bridge providing access across Nanticoke Creek in the Town of Nanticoke, and in the Town of Barker, there are only four bridges (3 across the Tioughnioga River and 1 across the Chenango River).

## TRANSPORTATION: BRIDGE CONDITION



**BRIDGE CONDITION IN THE WRA BY OWNERSHIP** (SEE MAP LEGEND FOR COLOR KEY)



## SECTION 2.15

# TRANSPORTATION (CONT.)

### RAIL

Broome County does not have passenger rail service but does provide freight commercial rail service along multiple rail lines. Some of the rail lines within the County are abandoned or discontinued, including a section on the south side of the Susquehanna River and mainly all of the eastern section of the River. Originally, railroad systems within the County were developed along the river corridors to move goods and people between urban and village centers. Many of the discontinued lines have either been repurposed for recreational trails or are envisioned to be reused for this purpose such as the Two Rivers Greenway and other associated trails. The Two Rivers Greenway is a system of multi-use trails across the County intended to provide safe and efficient transit corridors for pedestrians and bicyclists. Existing segments include the Vestal Rail Trail (Town of Vestal), Chenango River Trail (Town of Chenango), Chugnut Trail (Endicott) and Otsiningo Park Trail (Town of Binghamton). Ultimately, The Greenway Plan's conceptual route will connect the Greenway along the Susquehanna and Chenango Rivers throughout the County, and into Tioga County to Owego.

Within the WRA, there are five rail lines: Freight ML, Southern Tier, Syracuse ML, Utica ML, and Vestal IT lines. A railway corridor runs adjacent to all riverways with the exception of the Delaware River in the WRA.

- **The Freight ML rail line** is owned by Norfolk Southern Railway Co. and starts west of Binghamton, bisecting at the Town of Colesville and the Town of Conklin
- **The Southern Tier ML** is owned by Norfolk Southern Railway Co. and follows the Susquehanna River, from the Town of Union to the Town of Kirkwood.
- **The Syracuse ML** is located east of the Town of Barker and Town of Chenango. Syracuse ML is owned by Canadian National and is operated by Amtrak.

- **The Utica ML** starts north at the Village of Lisle extending south towards the City of Binghamton where it connects with the Southern ML. The Utica ML is owned by the Adirondack Scenic Railroad and operated by Amtrak.
- **The Vestal ML** runs along east of the City of Binghamton.

### AIR

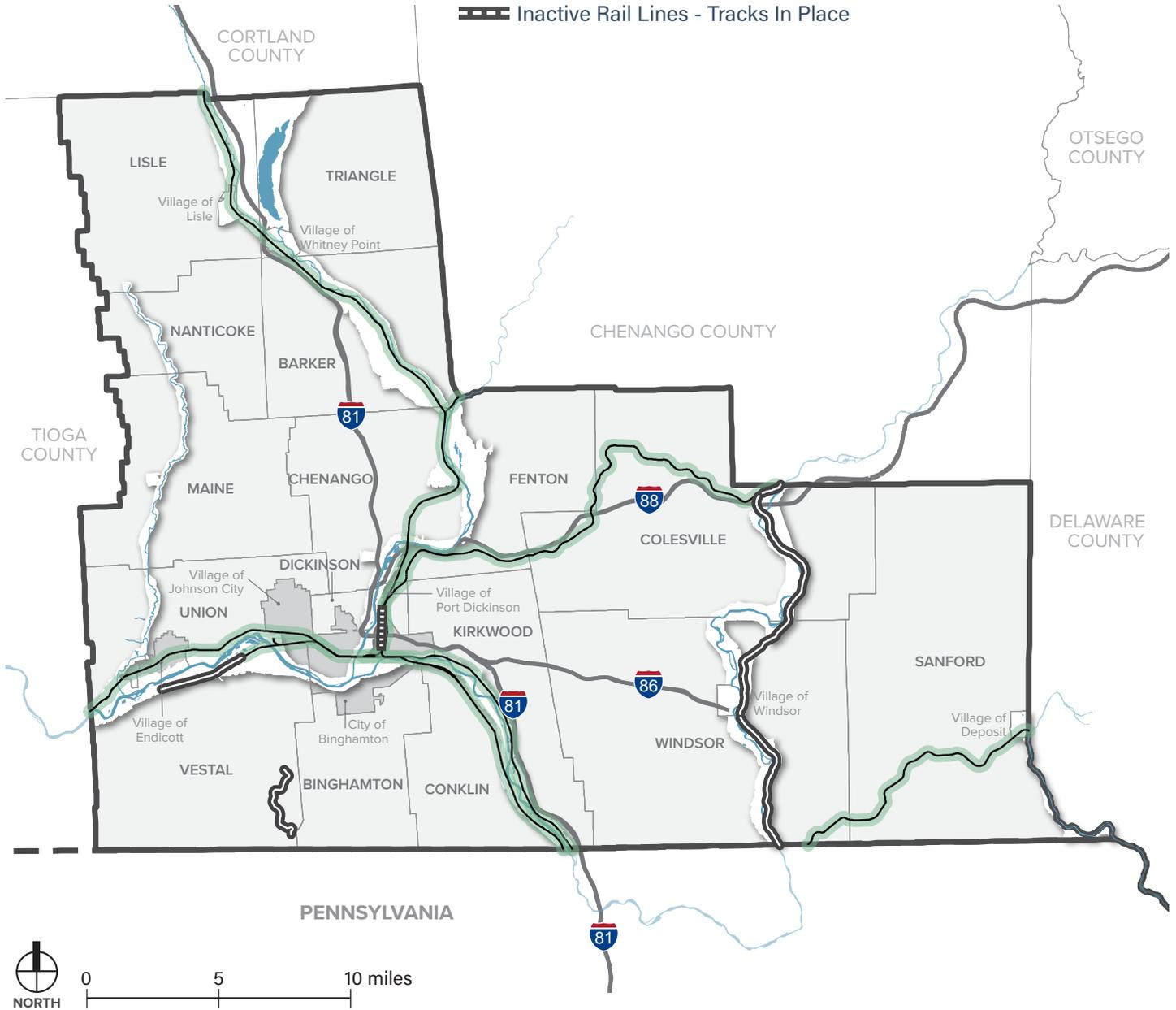
Broome County's primary air service is provided through the Binghamton Regional Airport (BRA) located in the Town of Maine, within the WRA. For 50 years, BRA has served the expanding commercial and passenger needs of the southern tier of New York. This facility is owned and operated by the Broome County Department of Aviation and primarily services business and leisure travelers daily to four major hub airports. Major airlines that fly in and out of BRA are US Airways, Northwest and United Express.

The Tri-Cities Airport is a much smaller local airport located in the Village of Endicott, within the WRA. This municipal airport services single engine, multi-engine and glider airplanes. The airport is situated on the north bend of the Susquehanna River, within the floodplain.

Located approximately 70 miles north of Broome County, the Syracuse Hancock International Airport provides access to most commercial airlines. It is accessible via I-81.

TRANSPORTATION: **RAIL LINES**

-  Active Rail Lines
-  Inactive Rail Lines - Tracks Removed
-  Inactive Rail Lines - Tracks In Place
-  Waterfront Revitalization Area



## SECTION 2.15

# TRANSPORTATION (CONT.)

### PUBLIC TRANSIT

Broome County owns and operates BC Transit, an extensive Countywide public transportation system that covers 17 routes over 80 square miles. This public transit network includes the urbanized cores of Binghamton, Endicott and Johnson City with frequent service for areas adjacent to the Susquehanna and Chenango Rivers. BC Transit offers a transit fixed route, and county-wide rural access on a limited basis. BC Transit's fixed route bus systems consists of large ADA Compliant, 40-foot buses that follow a designated route that serve bus stops along the way at scheduled times. Additionally, BC Transit services area schools including Binghamton University, BOCES campus, and Broome Community College, in addition to other regional academic institutions. BC Transit features a range of amenities including bicycle racks, a transit system map and route locator that helps guide riders.

BC Transit was originally designed to serve the densely populated urban core of the City of Binghamton, and surrounding municipalities. However, as trends shifted over time, transit route planning became more difficult due to the dispersion of the population throughout the county. This shift expanded the geographic area of transit demand.

BC Country is the public transportation service for rural residents of Broome County and requires registration before reserving a ride. BC Country provides services that allow residents to be picked up and driven to a particular destination in the urban core of Broome County and returned. BC Country provides services in all or parts of these towns/villages:

- Barker
- Binghamton
- Chenango
- Colesville
- Conklin
- Fenton
- Kirkwood
- Maine
- Vestal
- Whitney Point
- Windsor

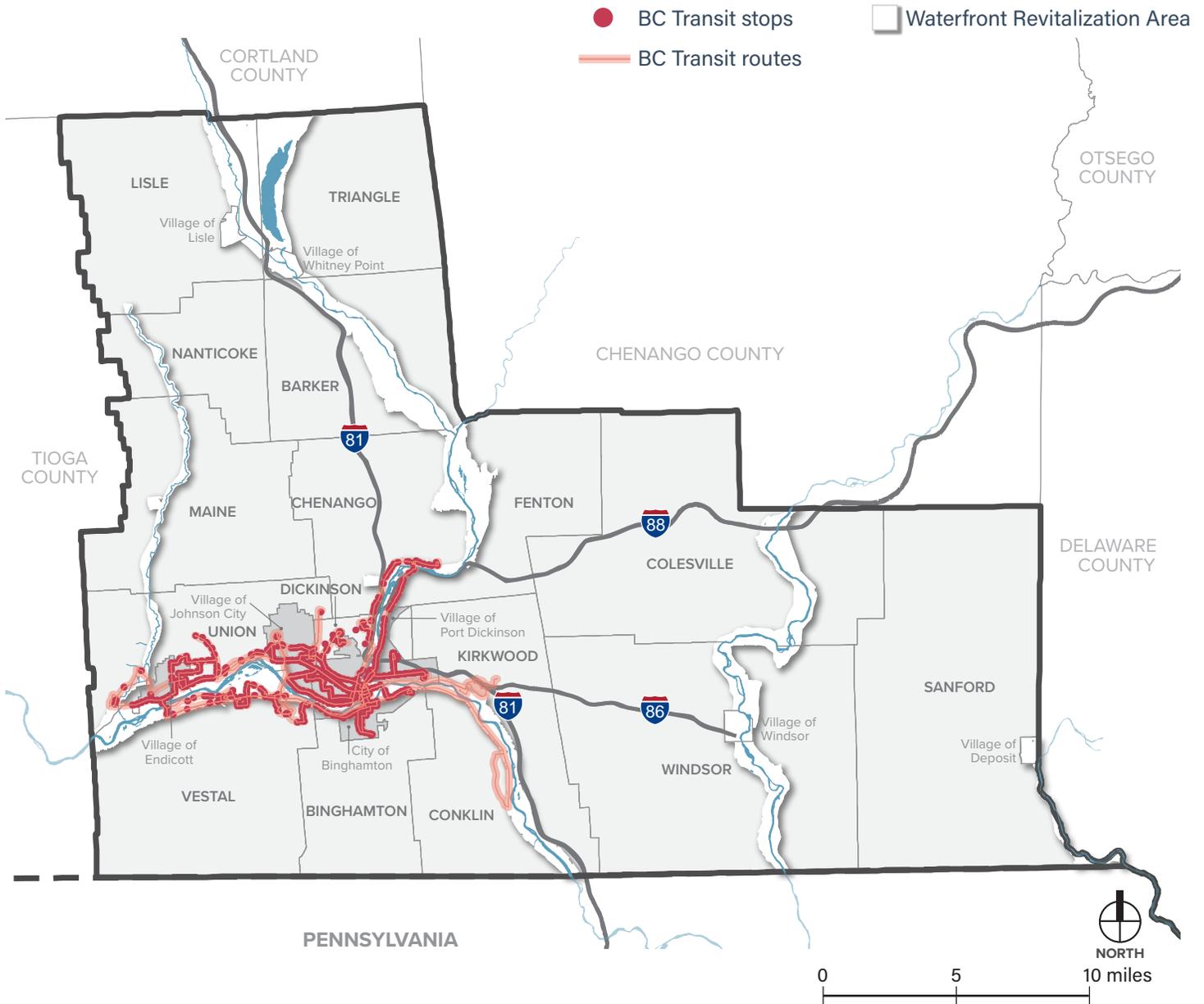
BC Transit is limited or not available in the following WRA municipalities: The Town of Triangle, Town and Village of Lisle, Town of Nanticoke and Town of Sanford.

The Greater Binghamton Transportation Center is a one-stop station that provides local, regional, and interstate bus travel, and features Broome County Department of Public Transportation as a primary transfer point. This center offers numerous amenities such as, indoor seating, customer service kiosks and restaurants. Bus services available at this center include, Coach USA, Greyhound, Megabus, OurBus and Trailways.

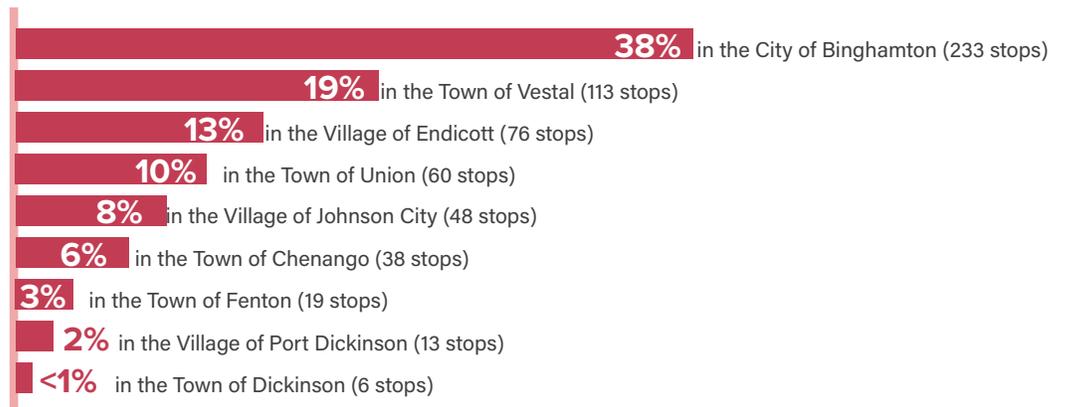
### BRIEF HISTORY OF MASS TRANSIT IN BROOME COUNTY

Mass transit officially began in Broome County in 1868 with the earliest vehicles of mass transit: multi-passenger wagons on rails pulled by horses. This transit network was managed by Port Dickinson Railroad Co and the City of Binghamton through a chartered legislature to provide the first street railway service. In 1932, Triple Cities Traction was the first organization to end the use of street railcars and use buses in a major New York State metropolitan area. It wasn't until 1968 when The Broome County Department of Public Transportation acquired the mass transit network due to the private company's loss of revenue.

TRANSPORTATION: PUBLIC TRANSIT



**606**  
bus stops in the WRA



## SECTION 2.15

# TRANSPORTATION (CONT.)

Under the Americans with Disabilities Act (ADA), paratransit services are ADA-mandated public transportation options for individuals who are unable to use the fixed-route bus serving their location. The Broome County Department of Public Transportation (BCDOT) provides paratransit services, including BC Lift). This transit option is a mandatory service that serves the disabled population within  $\frac{3}{4}$  of a mile around a BC Transit fixed route, which includes much of Binghamton, Johnson City, Endicott and Vestal. This service is flexible in scheduling and providing accommodations to specific riders. Demographic trends indicate that the senior population in the region will continue to increase through 2030 and the rate of disability is expected to see a similar trend. As both the elder and disabled populations increase, so will the likelihood for the demand of paratransit/demand response services.

### PEDESTRIAN AND BICYCLE CONNECTIONS

Most municipalities in the WRA have sidewalk and trail systems to support safe pedestrian movement. However, existing gaps in the pedestrian network, especially along major roadways, impede regional pedestrian mobility. In particular, Vestal Parkway has been a focal point for the County and surrounding municipalities, and significant recent investments have been made to improve multi-modal connectivity along the Parkway.

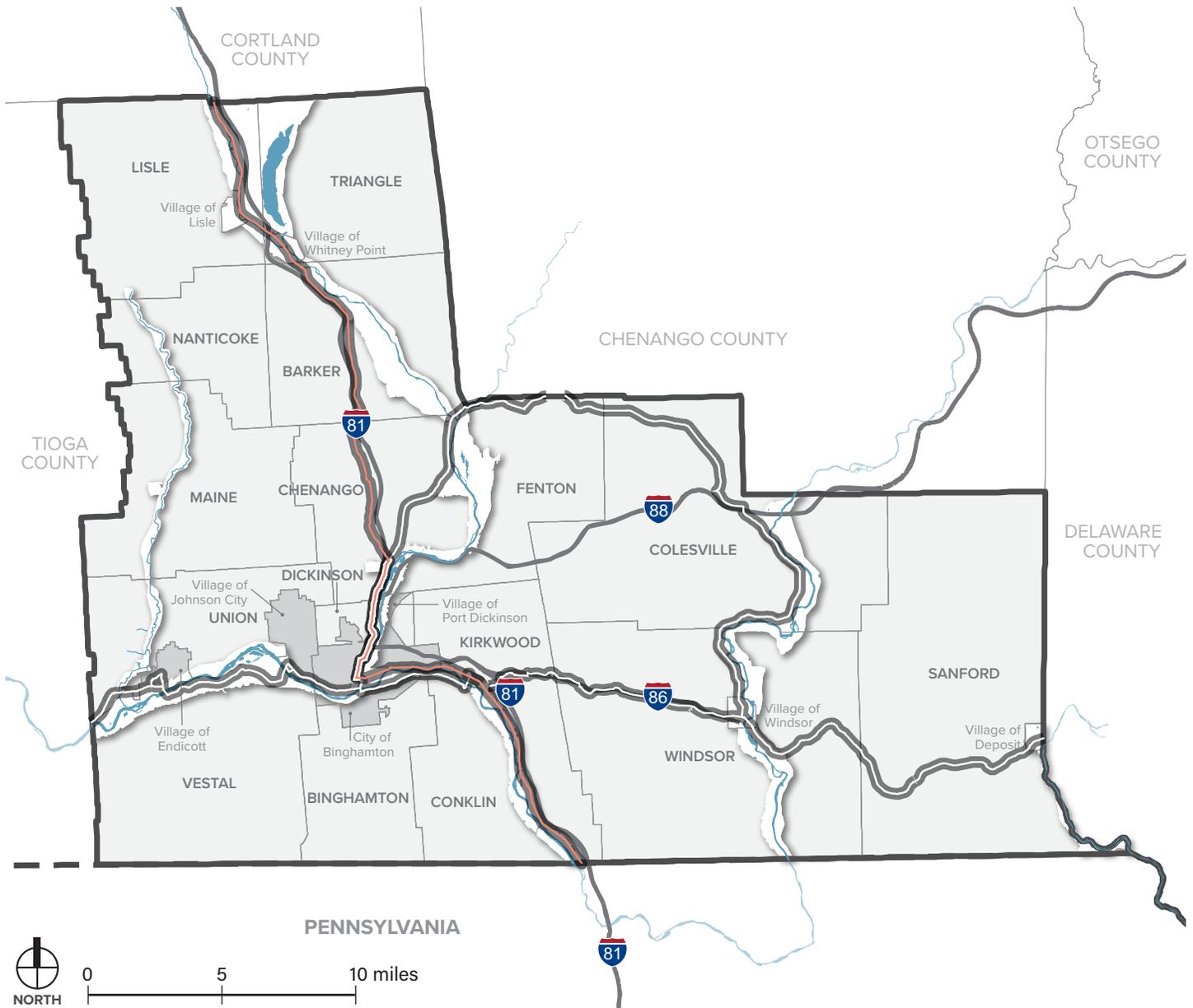
### Bicycle Routes

There are seven local designated bicycle routes in the County and 2 NYSDOT Bike Routes, 11 and 17. NYS Bike Route 17 and Bike Route 11 are geared towards long distance riding and bicycle touring. These routes also connect local bike routes in municipalities within the WRA which are described in more detail below.

- Bike Route 1 (East-West)- Serves the areas of Kirkwood, Binghamton, Johnson City, Union, Endicott, Town of Village of Port Dickinson. This Route connects with local Routes 3-7 and NY Bike Routes 11 and 17. This Route features nearby attractions, such as Chugnut Trail and West Endicott Park.
- Bike Route 2 (East-West): Serves the areas of Conklin, Binghamton, Vestal, Town & Village of Owego and connects with local Route 4 and NY Bike Route 17. This Route features nearby attractions, The Vestal Rail Trail and Chugnut Trail.
- Bike Route 3 (North-South): Serves the areas of Chenango, Dickinson and Binghamton. This Route connects with local Routes 1,4, and 5, and NY Bike Routes 11 and 17. This Route features nearby attractions, Otsiningo Park, Chenango Bridge Park and Chenango Riverwalk.
- Bike Route 4 (Primarily North-South): Serves the areas of Chenango, Fenton, Port Dickinson and Binghamton. This route connects with local Routes 1,2 and 3, and NY Bike Routes 11 and 17. This Route features nearby attractions, Confluence Park and Otsiningo Park.
- Bike Route 5 (Primarily East-West): Serves the areas of Binghamton, Dickinson and Johnson City connecting with local Routes 1 and 3 and NY Bike Routes 11 and 17. This Route features nearby notable facility such as Johnson City High School.
- Bike Route 6 (Half Loop, East-West): Serves the areas of Endicott and Union and features George W. Johnson Park as a nearby attraction. This Route only connects with local Route 1.
- Bike Route 7 (Half Loop East-West): Serves the areas of Endicott and Union and features Glendale Park as a nearby attraction. This Route connects local Route 1 and NY Bike Route 17.

TRANSPORTATION: **BIKE ROUTES**

-  NYS Bike Route 11
-  NYS Bike Route 17
-  Waterfront Revitalization Area



## SECTION 2.15

# TRANSPORTATION (CONT.)

### Trails and Greenways

Trails and greenways are vital recreational and environmental assets that support public health and provide economic, conservation and transportation benefits in a given community. Often noted as historic and cultural resources, these corridors enhance a community's overall health and wellness. Trail systems provide needed linkages between fragmented habitats, offer protection of plant and animal species and help preserve important natural landscapes. Trails are helpful tools for wetland preservation and the improvement of both air and water quality. These connectors are crucial elements in connecting urban or regional multi-modal transit systems; often serving as gateways to people in and out of transit stations. Trail facilities are often other means of transit that can help alleviate congestion issues on highways and streets by utilizing travel through natural areas on foot or by non-motorized means. These benefits play a huge role in a community's "livability". Broome County features numerous trail systems that add to the character, pride and identity of the region, playing a vital role in the "livability" of the County.

Several trail systems exist within the County that allow public access for recreational activities. These connectors include local, state, and national parks as well as private and non-profit organizations. The County's trails provide both physical and passive opportunities such as nature study, bicycling, horseback riding, skiing, cross-country and other activities. The County operates under the Two Rivers Greenway system that is comprised of multi-use trails across the region. This trail system was proposed in the Binghamton Metropolitan Study (BMTS, 1999) extending from the Greater Binghamton Urban Area to the Village of Owego in Tioga County. This initiative is intended to serve as efficient and safe transportation corridors for pedestrians and bicyclists. Trail corridors are managed by the municipality in which they reside, and the

County manages segments that run through County parks, properties and/right of ways. Aside from major trail systems and greenways, there are additional paved and natural surface trails throughout the County typically located in parks or nature preserves.

There are ample opportunities for the County's trail systems to connect with the larger trail system networks nearby. These larger trail systems include the Finger Lakes Trail, near the County's eastern border, and the D&H Trail in Pennsylvania, along the southern County border at Windsor. Linking these larger networks with the regional County networks can provide interconnections and heightened value between trail systems and the larger greenway network.

In an effort to increase the usage of the County's trail systems and promote physical activity, The Broome County Dozen Hiking Challenge was created through a joint collaboration between Triple Cities Hiking Club and Go All out Broome County. These local organizations require hikers to visit 12 identified hiking locations (state parks, town parks, nature preserves) and complete a specified challenge that comprises over 40 miles.

Existing trails within the WRA are discussed in more detail below.

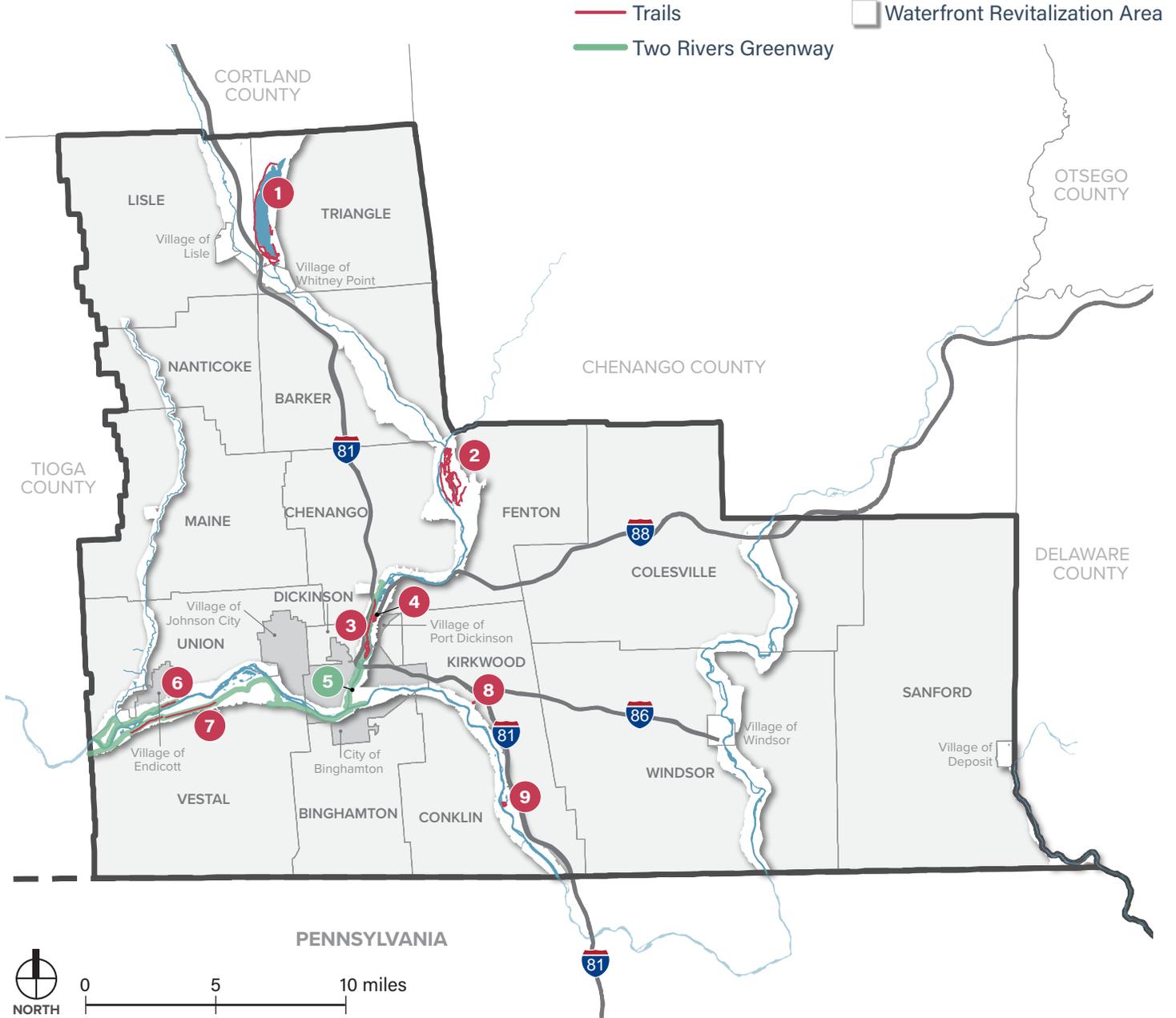
#### ***Whitney Point Reservoir Trail***

This trail travels from the paved end of Keibel Road past the back of the dam to Dorchester County Park and includes a hiking trail which runs along the west side of the reservoir.

#### ***Dorchester Park/Whitney Point Lake***

Dorchester park features a 2-mile paved trail with a walking and biking path. This trail network is part of the Broome County Dozen Hiking Challenge and is a participant in the Wegman's "Passport to Family Wellness" program. The trail entrance is

# TRANSPORTATION: TRAILS AND GREENWAYS



**1 Whitney Point Lake / Dorchester Park**

LENGTH: 8.5 miles  
SURFACE: Natural & Paved

**2 Chenango Valley State Park**

LENGTH: 13 miles  
SURFACE: Natural

**3 Otsiningo Park**

LENGTH: 4 miles  
SURFACE: Paved

**4 Port Dickinson Community Park**

LENGTH: 0.75 miles  
SURFACE: Paved

**5 Two Rivers Greenway**

LENGTH: 13.5 miles  
SURFACE: Paved

**6 Chugnut Trail**

LENGTH: 0.5 miles  
SURFACE: Paved

**7 Vestal Rail Trail**

LENGTH: 3.5 miles  
SURFACE: Paved

**8 Valley Park**

LENGTH: 0.25 miles  
SURFACE: Paved

**9 Veterans River Park**

LENGTH: 0.6 miles  
SURFACE: Paved

## SECTION 2.15

# TRANSPORTATION (CONT.)

on NY Route 26, about a mile north of Whitney Point. The walking path starts from Dorchester Park beach and proceeds south of the reservoir next to the dam and then over to the Keibel Road parking lot near the Whitney Point High School. The Whitney Point Rotary, Broome County, and the U.S. Army Corps of Engineers are currently working together to clear a rustic nature path that will connect Dorchester Park to the Upper Lisle Bridge.

### ***Chenango Valley, Tow Path/River Road***

This 3.0-mile trail is located in the Town of Fenton and offers a trail for pedestrian use.

### ***Otsiningo Park Trail***

This one mile long moderately trafficked loop trail is located in Otsiningo Park. This connector connects Otsiningo Park to Otsiningo North Park expanding opportunities for pedestrians and bicyclists entering from Bevier Street or Upper Front Street. These four types of trails include, Pond Loop Trail (0.7 miles), Center Loop Trail (0.9 miles), River Trail (0.6 miles) and North Trail (1.3 miles). This trail features a range of year-round activities including, hiking, nature trips, bird watching, running and snowshoeing. The trail allows dogs, but they must be on a leash. This trail is good for all skill levels. This trail network is part of the Broome County Dozen Hiking Challenge.

### ***Otsiningo Trail***

This approximately 3 mile long trail is located in the Town of Chenango and is available for pedestrians and bicyclists to use. This trail connects with Otsiningo North Park.

### ***Port Dickinson Community Park Trail***

This trail is approximately 0.75 miles long and located in Port Dickinson Community Park. The trail is available for both pedestrian and bicyclist use.

### ***Chugnut Trail***

Chugnut Trail is located in Endicott and can be accessed under the McKinley Ave Bridge beside the Susquehanna River on Riverview Drive. This paved trail is known for birdwatching, especially in the winter and runs by Union- Endicott High School. This trail is available to pedestrians and cyclists and restricts non-motorized and motorized vehicular access. Broome County was awarded \$2.6 million to make improvements to Chugnut and expand the trail to Grippen Park. The County's aim for expansion was to attract more visitors to the trail which would bring those people to other parts of the area, enhancing local business and service. This expansion links a nature trail that connects to the Roundtop Picnic Area.

### ***Vestal Rail Trail***

This 3.5-mile trail is divided into east and west sections and runs between North Main Street and African Road, located just north of and parallel to the Vestal Parkway in Vestal. This asphalt rail trail supports bicycling, inline skating, walking and cross-country skiing. The trail is also wheelchair accessible and benches, a scenic overlook, and a nature trail.

### ***Valley Park***

Valley Park, located in the Town of Kirwood, features approximately one-quarter mile of paved walking paths. These paths loop a ball field and provide access to park destinations, such as the creek, basketball courts, parking, and playground.

### ***Veterans River Park***

River Park is located in the Town of Kirwood and includes just over one-half mile of paved walking paths. Similar to Valley Park, these paths connect destinations within the park, including ball fields, tennis and basketball courts, soccer fields, a playground, restroom facility, and parking area.

## TWO RIVERS GREENWAY TRAIL

The Two Rivers Greenway is a 13.5 mile system of paved trails for walking and biking paralleling the Susquehanna and Chenango Rivers. The Greenway connects multiple municipalities, including the City of Binghamton, the Towns of Vestal, Dickinson, and Chenango, and the Villages of Endicott, Johnson City, and Port Dickinson. This greenway network includes several existing and proposed local trail systems (e.g., Chugnut Trail, Johnson City Rail Trail, and the Vestal Rail Trail).

Recent expansions of the Greenway overlap with the WRA and include:

- A new segment in the Town of Vestal from the intersection of Pennsylvania and Vestal Avenues to Murray Hill Road (2.5 miles of new trail), and
- A new segment in the Town of Union and Village of Endicott, connecting the intersection of Bridge Street and Vestal Avenue to Grippen Park and beyond to Glendale Park (3.2 miles of new trail); and,
- A new segment along Front Street, connecting Prospect Street in the City of Binghamton to Bevier Street Bridge in the Town of Dickinson.

A trail maintenance plan was published by the Binghamton Metropolitan Transportation Study in 2019. The plan includes a maintenance assessment for segments of the Greenway system as well as identifies best practices in maintenance and strategies for ensuring the long-term preservation of this valuable multi-modal resource.



## SECTION 2.16

# KEY FINDINGS

**The Broome County WRA possesses valuable assets that provide a foundation for developing an integrated, dynamic, and accessible waterfront experience. The following opportunities and challenges have been derived based on the analysis of the existing conditions assessment.**

### CHALLENGES

Key challenges relate to mitigating flood and environmental risks, building local capacity, updating policies and regulations, spurring economic growth, and expanding public access along the waterfront.

#### Regulatory Issues

Barriers posed by dated laws, zoning, and lack of regulations focused on risk reduction and flood protective measures limit the ability to implement resilience strategies through policy. Inconsistencies across jurisdictions also pose issues and without modernized, consolidated statutes guiding resilient planning, communities stay vulnerable to water hazards while struggling to spur waterfront access, ecosystem preservation, and economic growth.

#### Local Capacity

Limited technical, administrative, and financial capacity across municipalities in Broome County restricts the implementation of critical resilience projects. This deficiency in human and fiscal capital is particularly acute in rural localities where climate threats intensify against a landscape of aging infrastructure and distressed socioeconomic indicators. Absent investments to grow expertise, expand technical staff, streamline administrative processes, and provide adequate funding streams, communities lack the institutional frameworks necessary to coordinate and advance asset-protection adaptations pivotal to safeguarding exposed waterfront populations.

#### Flood Risks

There are significant flood risks to both socially vulnerable populations, critical infrastructure, and assets in the WRA. This includes risks to infrastructure like wastewater treatment facilities, as well as community assets like parks. Mitigating these risks through protective measures while supporting recreational access and tourism is a major challenge.

#### Other Environmental Risks

In addition to flooding, other environmental risks such as erosion, stormwater runoff, brownfields, and impacts to water quality pose challenges. Yet economic pressures incentivize development in vulnerable areas, requiring balanced strategies that intertwine natural asset protection with growth opportunities through green infrastructure, nature-based innovations, and updated legal frameworks.

# WATERFRONT REVITALIZATION CHALLENGES



## Regulatory Issues

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Dated regulations focused on risk reduction and flood protective measures limit the ability to implement resilience strategies through policy.



## Local Capacity

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Limited technical, administrative, and financial capacity across municipalities restricts the implementation of critical resilience projects.



## Flood Risks

---

There are significant flood risks to both socially vulnerable populations, critical infrastructure, and assets in the WRA.



## Other Environmental Risks

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Other environmental risks include erosion, stormwater runoff, brownfields, and impacts to water quality.

## SECTION 2.16

# KEY FINDINGS (CONT.)

### OPPORTUNITIES

The Broome County WRA presents a timely opportunity to bring new vitality and responsible growth to the river corridors and surrounding communities. Strategic investments in public access, trails, resilient infrastructure, habitat protections, and sustainable development policies promise to reconnect residents and visitors to the County's waterways.

#### Economic Growth

Broome County's WRA presents tremendous potential to catalyze a thriving river-based economy centered on conservation and access, linking communities to the waterfront's recreational, ecological, and cultural assets. Strategically enhancing equitable public utilization balanced with sustainable development policies promise new vitality for distressed regions.

#### Access and Connectivity

There are opportunities to expand public access to the waterfront through trails, boat launches, and other recreational infrastructure. Linking existing parkland and trails into a connected regional network also enhances regional connectivity.

#### Environmental Protection

Proactively protecting wetlands, riparian zones, floodplains and other natural assets would help mitigate flooding while enhancing habitat. Sustainable practices that intertwine conservation, equity, and growth can catalyze innovative economic clusters centered on ecosystem restoration, resilience, stormwater management, and other nature-based solutions.

### Resilience Planning

Recent hazard mitigation planning and climate-focused efforts provide a strong foundation for expanding and implementing resilience strategies. Flood vulnerability assessments can inform updated policies, zoning, site design, and protective infrastructure.

### Regional Collaboration

Cross-jurisdictional partnerships on issues such as stormwater, emergency response, parklands, and trails would increase efficiency and access to funding, while direct community involvement through visioning exercises, committees, and public workshops ensures plans meet local needs and facilitates smooth implementation. Regional initiatives aligned around sustainable development and resilience goals are also impactful means of engagement.

# WATERFRONT REVITALIZATION OPPORTUNITIES



## Economic Growth

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Broome County's WRA presents tremendous potential to catalyze a thriving river-based economy centered on existing assets.



## Access and Connectivity

---

There are opportunities to expand public access to the waterfront through trails, boat launches, and other recreational infrastructure.



## Environmental Protection

---

Proactively protecting wetlands, riparian zones, floodplains and other natural assets help mitigate flooding while enhancing habitat.



## Resilience Planning

---

Hazard mitigation planning and climate-focused efforts provide a strong foundation for expanding and implementing resilience strategies.



## Regional Collaboration

---

Cross-jurisdictional and regional partnerships increase efficiency and access to funding.



## SECTION 3

## **WATERFRONT REVITALIZATION POLICIES**

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This section details the 44 New York State policy statements for inland waterways and refines the explanations of each policy to relate to the needs of the Broome County WRA.

The policies are a key tool for the WRA as they guide federal, state and local agencies in determining if a local action is consistent with the LWRS.

When developing a LWRP, each municipality should tailor the explanations of the policies to address its unique needs and circumstances. This ensures that the LWRP is relevant and applicable to the specific municipality.

## SECTION 3.1

# INTRODUCTION

**The inland waterway policies are a critical component of the LWRS because they provide enforceable statements that direct actions within the WRA. The LWRS policies are applicable to all inland waterways, with each policy derived from implementing State laws. Within this context, sub-policies and policy explanations provide further detail that address the local context of the Broome County WRA. This additional detail is provided for explanatory purposes only and may assist in determining policy consistency during a review conducted under the federal Coastal Zone Management Act.**

### ABOUT THE POLICIES

This section of the LWRS details the State's 44 policies, which are organized into 11 topics that address a variety of issues. These policy topics include:

- Development Policies
- Fish and Wildlife Policies
- Flooding and Erosion Hazards Policies
- General Policy
- Public Access Policies
- Recreation Policies
- Historic and Scenic Resources Policies
- Agricultural Lands Policy
- Energy and Ice Management Policies
- Water and Air Resources Policies
- Wetlands Policy

### Sub-Policies

For a few policies, a sub-policy highlights a specific issue that is relevant to Broome County WRA within the context of the overarching policy.

### Policies Identified as Not Applicable

Each of the State policies were reviewed to determine applicability to Broome County. Those policies that are not applicable are detailed as such and shown in gray.

### Policy Explanations

Following each policy statement is an explanation that describes the applicability, intent and/or context of the policy, where appropriate. Within these explanations are refinements to address the issues in the Broome County WRA. For several policies, specific guidelines or definitions are provided to clarify a policy or identify how to evaluate an action. Each of the guidelines and definitions identified under a sub-heading within policy explanations and serve as a functional reference in applying the policies.

### SUMMARY OF POLICIES

To provide a general overview, the following table lists all applicable policies and sub-policies as well as identifies if there are guidelines or definitions within the policy explanation.

## TOOLS FOR APPLYING THE POLICIES TO SPECIFIC ACTIONS

**The State's 44 LWRS policies represent a balance between economic development and preservation. To determine if actions comply with this desired balance, several policies include specific guidelines to assist in the decision-making process. These guidelines are highlighted within the policy explanations and serve as tools for determining policy consistency. Also highlighted are definitions for terms used in the policy explanation, which may provide additional clarity in determining policy consistency.**

## SUMMARY OF POLICIES

		GUIDELINES	DEFINITIONS	
DEVELOPMENT	# POLICY			
	1	Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.	●	
	2	Facilitate the siting of water dependent uses and facilities on or adjacent to inland waterways.	●	●
	4	Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.	●	
	5	Encourage the location of development in areas where public services and facilities essential to such development are adequate.	●	
	6	Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.		
FISH & WILDLIFE	8	Protect fish and wildlife resources in the waterfront revitalization area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources. → <i>SUB-POLICY 8A: Protect fish and wildlife resources through sound invasive species management practices within the waterfront revitalization area.</i>		●
	9	Expand recreational use of fish and wildlife resources in the waterfront revitalization area by increasing access to existing resources, supplementing existing stocks, and developing new resources.	●	
FLOODING & EROSION HAZARDS	11	Buildings and other structures will be sited in the waterfront revitalization area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.		
	12	Activities or development in the waterfront revitalization area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs. → <i>SUB-POLICY 12A: Proper steep slope management will be undertaken to reduce public health, welfare and safety risks.</i>		
	13	The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.		
	14	Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.		
	15	Mining, excavation, or dredging in inland waterways shall not significantly interfere with the natural inland waterway processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.		
	16	Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.		
	17	Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.		●

\*Policies 3, 7, 10, 24 and 29 identified as not applicable within policy explanation section.

## SUMMARY OF POLICIES (CONT.)

		GUIDELINES	DEFINITIONS
GENERAL	18	To safeguard the vital economic, social and environmental interests of the State and of its citizens, proposed major actions in the waterfront revitalization area must give full consideration to those interests and to the safeguards which the State has established to protect valuable inland waterway resource areas.	
	19	Protect, maintain, and increase the level and types of access to public water related recreation resources and facilities. → SUB-POLICY 19A: Incorporate the expansion of Broome County's network of trails to connect water-dependent and water-enhanced uses.	•
PUBLIC ACCESS	20	Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.	•
	21	Water dependent and water enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the shorefront. → SUB-POLICY 21A: Water dependent and water enhanced recreation within the WRA will be coordinated as a cohesive inland waterway resource.	
RECREATION	22	Development when located adjacent to the shore will provide for water-related recreation whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development.	
	23	Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities, or the Nation.	
HISTORIC & SCENIC RESOURCES	25	Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the waterfront revitalization area.	•
	26	Conserve and protect agricultural lands in the waterfront revitalization area.	•
AGRICULTURAL LANDS	27	Decisions on the siting and construction of major energy facilities in the shorefront area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.	
	28	Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats or increase shoreline erosion or flooding.	
ENERGY & ICE MANAGEMENT			

\*Policies 3, 7, 10, 24 and 29 identified as not applicable within policy explanation section.

## SUMMARY OF POLICIES (CONT.)

		GUIDELINES	DEFINITIONS
	<b># POLICY</b>		
WATER & AIR RESOURCES	30	Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into inland waterways will conform to State and National water quality standards.	
	31	State policies and management objectives of approved Local Waterfront Revitalization Strategies will be considered while reviewing inland waterway classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.	
	32	Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.	
	33	Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into inland waterways.	
	34	Discharge of waste materials into inland waterways from vessels subject to State jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.	
	35	Dredging and filling in inland waterways and disposal of dredged material will be undertaken in a manner that meets existing State dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.	
	36	Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into inland waterways; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.	
	37	Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into inland waterways.	
	38	The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.	
	39	The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within the waterfront revitalization area will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.	
	40	Effluent discharged from major steam electric generating and industrial facilities into inland waterways will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.	
	41	Land use or development in the waterfront revitalization area will not cause national or State air quality standards to be violated.	
	WETLANDS	42	Waterfront revitalization program policies will be considered if the State reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.
43		Land use or development in the waterfront revitalization area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.	
44		Preserve and protect freshwater wetlands and preserve the benefits derived from these areas.	

\*Policies 3, 7, 10, 24 and 29 identified as not applicable within policy explanation section.

## SECTION 3.2

# DEVELOPMENT POLICIES

### POLICY 1

**Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.**

#### Tools Included in Policy 1:

- *Guidelines for State or Local Actions in Redevelopment Area and Outside a Redevelopment Area*

### EXPLANATION OF POLICY #1

State and local agencies must ensure that their actions further the revitalization of waterfront areas. **Revitalization of once dynamic waterfront areas is one of the most effective means of encouraging economic growth in the State, without consuming valuable open space outside of these waterfront areas.** Waterfront redevelopment is also one of the most effective means of rejuvenating or at least stabilizing residential and commercial districts adjacent to the redevelopment area.

In responding to this policy, several other policies must be considered, including:

- Policy 2, which prioritizes uses requiring a location abutting the waterfront in any redevelopment effort;
- Policy 5, which encourages development in areas where public services and facilities essential to such development as the costs for providing basic services to such areas is frequently less than providing new services to areas not previously developed; and
- Policy 6, which aims to expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

Local governments through waterfront revitalization programs have the primary responsibility for implementing this policy. Though Local Waterfront Revitalization Strategies need not be limited to redevelopment, local governments are urged to identify areas as suitable for redevelopment, and establish and enforce redevelopment programs. Through the LWRS, several areas are identified as suitable for redevelopment and include, but are not limited to, the following locations: the State-owned parcel on the northwest corner of Court Street / Colesville Road in the Town of Kirkwood; the former BAE at 600 Main Street in the Town of Union; the Northgate Plaza in the Town of Chenango; Davis College in the Village of Johnson City, Lock 107 in the Town of Fenton, and Ouaquaga Bridge in the Town of Colesville.

To assist in determining compliance with Policy 1, guidelines for state or local actions in a redevelopment area as well as actions outside of a redevelopment area are detailed as follows:

## SECTION 3.2

**DEVELOPMENT POLICIES** (CONT.)**POLICY 1 GUIDELINES FOR STATE OR LOCAL ACTIONS IN REDEVELOPMENT AREA AND OUTSIDE A REDEVELOPMENT AREA**

When a State or local action is proposed to take place in an urban waterfront area regarded as suitable for redevelopment, the following guidelines will be used:

1. Priority should be given to uses which are dependent on a location adjacent to the water. See Policy 2 for definition of water-dependent uses;
2. The action should enhance existing and anticipated uses. For example, roadway reconstruction should be designed and constructed so as to incorporate and prioritize connections to the existing network of pedestrian and bicyclist connections;
3. The action should serve as a catalyst to private investment in the area. For example, enhanced access to waterfront recreation from a downtown or village center should leverage the development of complementary business activity;
4. The action should improve the deteriorated condition of a site and, at a minimum, must not cause further deterioration. For example, a building should not be abandoned without protecting it against vandalism and/or structural decline;
5. The action must lead to development which is compatible with the character of the area, with consideration given to scale, architectural style, density, and intensity of use. For example, each downtown or village center in Broome County has a unique character that future development should attentively complement and/or enhance;
6. The action should have the potential to improve the existing economic base of the community and, at a minimum, must not jeopardize this base. For example, waterfront development meant to serve consumer needs should not be supported in an area where no increased consumer demands is expected and existing development is already meeting demand;
7. The action should improve adjacent and upland views of the water, and, at a minimum, must not affect these views in an insensitive manner;
8. The action should have the potential to improve the potential for multiple uses of the site.

If a State or local action is proposed to take place outside of a given deteriorated, underutilized urban waterfront area suitable for redevelopment, and is either within the relevant community or adjacent coastal communities, the agency proposing the action must first determine if it is feasible to take the action within the deteriorated, underutilized urban waterfront area in question. If such an action is feasible, the agency should give strong consideration to taking the action in that area. If not feasible, the agency must take the appropriate steps to ensure that the action does not cause further deterioration of that area.

## SECTION 3.2

# DEVELOPMENT POLICIES (CONT.)

### POLICY 2

**Facilitate the siting of water dependent uses and facilities on or adjacent to inland waterways.**

#### Tools Included in Policy 2:

- *Definition of Water-Dependent Uses*
- *Definition of Water-Enhanced Uses*
- *Definition of Temporary Non-Water-Dependent Uses*
- *Guidelines For Encouraging and Facilitating Where Water-Dependent Uses are Located*
- *Guidelines For Promoting Water-Dependent Uses*

### EXPLANATION OF POLICY #2

There is a finite amount of waterfront space suitable for development purposes. Consequently, while the demand for any given piece of property will fluctuate in response to varying economic and social conditions, on a statewide basis, the only reasonable expectation is that long-term demand for waterfront space will intensify.

The traditional method of land allocation, i.e., the real estate market, with or without local land use controls, offers little assurance that uses which require waterfront sites will, in fact, have access to the State's inland waterways. To ensure that such "water-dependent" uses can continue to be accommodated within the State, State agencies will avoid undertaking, funding, or approving non-water-dependent uses when such uses would preempt the reasonably foreseeable development of water dependent uses; furthermore, agencies will utilize appropriate existing programs to encourage water dependent activities. The application of this policy across Broome County will ensure water-dependent uses are accommodated within the WRA.

Water dependent activities shall not be considered a private nuisance, provided such activities were commenced prior to the surrounding activities and have not been determined to be the cause of conditions dangerous to life or health and any disturbance to enjoyment of land and water has not materially increased.

To assist in identifying, selecting and promoting uses, the following definitions and guidelines are provided:

### POLICY 2 DEFINITION OF WATER-DEPENDENT USES

A water dependent use is an activity which can only be conducted on, in, over or adjacent to a water body because such activity requires direct access to that water body, and which involves, as an integral part of such activity, the use of the water.

## SECTION 3.2

**DEVELOPMENT POLICIES** (CONT.)**POLICY 2 DEFINITION OF WATER-DEPENDENT USE (CONT.)**

The following uses and facilities are considered as water-dependent:

1. Uses which depend on the utilization of resources found in inland waterways (for example: fishing, mining of sand and gravel, aquaculture activities);
2. Recreational activities which depend on access to inland waterways (for example: swimming, fishing, boating, wildlife viewing);
3. Uses involved in the waterway/land transfer of goods (for example: docks, loading areas, pipelines, short-term storage facilities);
4. Structures needed for navigational purposes (for example: dams, locks, lighthouses);
5. Flood and erosion protection structures (for example: breakwaters, bulkheads);
6. Facilities needed to store and service boats and ships (for example: marinas, boat repair, boat construction yards);
7. Uses requiring large quantities of water for processing and cooling purposes (for example: hydroelectric power plants, fish processing plants, pumped storage power plants);
8. Uses that rely heavily on the waterborne transportation of raw materials or products which are difficult to transport on land, thereby making it critical that a site near to shipping facilities be obtained (for example: coal export facilities, cement plants, quarries);
9. Uses which operate under such severe time constraints that proximity to shipping facilities become critical (for example: firms processing perishable foods);
10. Scientific/educational activities which, by their nature, require access to inland waterways (for example: certain meteorological and scientific activities);
11. Support facilities which are necessary for the successful functioning of permitted water-dependent uses (for example: parking lots, snack bars, first aid stations, short-term storage facilities). Though these uses must be near the given water dependent use they should, as much as possible, be sited inland from the water dependent use rather than on the shore.

**POLICY 2 DEFINITION OF WATER-ENHANCED USES**

In addition to water dependent uses, those uses which are enhanced by a waterfront location should be encouraged to locate along the shore, though not at the expense of water dependent uses. A water-enhanced use is defined as a use or activity which does not require a location adjacent to or over inland waterways, but whose location on land adjacent to the shore adds to the public use and enjoyment of the water's edge. Water enhanced uses are primarily recreational, cultural, retail, or entertainment uses. A restaurant which uses good site design to take advantage of a waterfront view is an example of a water-enhanced use.

**POLICY 2 DEFINITION OF TEMPORARY NON-WATER-DEPENDENT USES**

If there is no immediate demand for a water dependent use in a given area but a future demand is reasonably foreseeable, temporary non-water dependent uses should be considered preferable to a non-water dependent or enhanced use which involves an irreversible or nearly irreversible commitment of land. Parking lots, passive recreational facilities, outdoor storage areas, and non-permanent structures are uses or facilities which would likely be considered as "temporary" non-water-dependent uses.

## SECTION 3.2

# DEVELOPMENT POLICIES (CONT.)

### POLICY 2 GUIDELINES FOR ENCOURAGING AND FACILITATING WHERE WATER-DEPENDENT USES ARE LOCATED

In the actual choice of sites where water-dependent uses will be encouraged and facilitated, the following guidelines should be used:

1. Competition for space: Competition for space, or the potential for it, should be indicated before any given site is promoted for water dependent uses. The intent is to match water dependent uses with suitable locations and thereby reduce any conflicts between competing uses that might arise. Not just any site suitable for development should be chosen as a water dependent use area. The choice of a site should be made with some meaningful impact on the real estate market anticipated. The anticipated impact could either be one of increased protection to existing water dependent activities or else the encouragement of water dependent development.
2. In-place facilities and services: Most water dependent uses, if they are to function effectively, will require basic public facilities and services. In selecting appropriate areas for water-dependent uses, consideration should be given to the following factors:
  - a. The availability of public sewers, public water lines and adequate power supply;
  - b. Access to the area for trucks and rail, if heavy industry is to be accommodated; and
  - c. Access to public transportation, if a high number of person trips are to be generated.
3. Access to navigational channels: If commercial shipping, commercial fishing, or recreational boating are planned, the locality should consider setting aside a site, within a sheltered harbor, from which access to adequately sized navigation channels would be assured.
4. Compatibility with adjacent uses and the protection of other inland waterway resources: Water dependent uses should be located so that they enhance, or at least do not detract from, the surrounding community. Consideration should also be given to such factors as the protection of nearby residential areas from odors, noise and traffic. Affirmative approaches should also be employed so that water-dependent use and adjacent uses can serve to complement one another. For example, a recreation-oriented water dependent use area could be sited in an area already oriented towards tourism or business activity that supports tourism within a downtown or village center. Clearly, a marina, fishing pier or swimming area would enhance, and in turn be enhanced by, nearby restaurants, motels and other non-water-oriented tourist activities. Water dependent uses must also be sited so as to avoid adverse impacts on the significant inland waterway resources.
5. Preference to underutilized sites: The promotion of water-dependent uses should serve to foster development as a result of the capital programming, permit expediting and other State and local actions that will be used to promote the site. Nowhere is such a stimulus needed more than in those portions of the State's waterfront areas which are currently underutilized.
6. Providing for expansion: A primary objective of the policy is to create a process by which water dependent uses can be accommodated well into the future. State agencies and localities should therefore give consideration to long-term space needs and, where practicable, accommodate future demand by identifying more land than is needed in the near future.

## SECTION 3.2

**DEVELOPMENT POLICIES** (CONT.)**POLICY 2 GUIDELINES FOR PROMOTING WATER-DEPENDENT USES**

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

1. Favored treatment to water dependent use areas with respect to capital programming. Particular priority should be given to the construction and maintenance of port or harbor facilities, roads, railroad facilities, and public transportation within areas suitable for water dependent uses.
2. When areas suitable for water dependent uses are publicly owned, favored leasing arrangements should be given to water dependent uses.
3. Where possible, consideration should be given to providing water dependent uses with property tax abatements, loan guarantees, or loans at below market rates.
4. State and local planning and economic development agencies should actively promote water dependent uses. In addition, a list of sites available for non-water-dependent uses should be maintained in order to assist developers seeking alternative sites for their proposed projects.
5. Local and State agencies should work together to streamline permitting procedures that may be burdensome to water dependent uses. This effort should begin for specific uses in a particular area.
6. Local land use controls, especially the use of zoning districts exclusively for waterfront uses, can be an effective tool of local government in assuring adequate space for the development of water dependent uses.

## SECTION 3.2

# DEVELOPMENT POLICIES (CONT.)

**POLICY 3:** Further develop the State's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of State public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

### EXPLANATION OF POLICY #3

Under the current conditions this policy does not apply to Broome County. The aim of this policy is to support port development in New York, Albany, Buffalo, Ogdensburg, and Oswego.

### POLICY 4

**Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.**

#### Tools Included in Policy 4:

- *Guidelines for Strengthening Economic Base of Smaller Harbor Areas*

### EXPLANATION OF POLICY #4

This policy recognizes that the traditional activities occurring in and around numerous smaller harbors throughout the State's inland waterways contribute much to the economic strength and attractiveness of these harbor communities. Thus, efforts of state agencies shall center on promoting such desirable activities as recreational and commercial fishing, ferry services, marinas, historic preservation, cultural pursuits, and other compatible activities which have made smaller harbor areas appealing as tourist destinations and as commercial and residential areas. Particular consideration will be given to the visual appeal and social benefits of smaller harbors which, in turn, can make significant contributions to the State's tourism industry.

With waterway corridors that traverse Broome County, the downtowns and village centers along these waterways serve as places of historic economic activity. As the County is repositioned to support innovation, these centers provide an opportunity to utilize existing infrastructure to enhance the visitor and resident experience. Each downtown or village center should be developed as a node along the network of waterways. This development would support the efforts Susquehanna Heritage Area in telling the authentic story of the area and serve to promote the natural features and historic development as part of a cohesive county-wide attraction.

The following guidelines provide assistance in determining if an action will strengthen the economic base of a smaller harbor area.

## SECTION 3.2

**DEVELOPMENT POLICIES** (CONT.)**POLICY 4 GUIDELINES FOR STRENGTHENING ECONOMIC BASE OF SMALLER HARBOR AREAS**

The following guidelines shall be used in determining if an action will strengthen the economic base of small harbor areas:

1. The action shall give priority to those traditional and/or desired uses which are dependent on or enhanced by a location adjacent to the water.
2. The action will enhance or not detract from or adversely affect existing traditional and/or desired anticipated uses.
3. The action shall not be out of character with, nor lead to development which would be out of the character with, existing development in terms of the area's scale, intensity of use, and architectural style.
4. The action must not cause a site to deteriorate, e.g., a structure shall not be abandoned without protecting it against vandalism and/or structural decline.

The action will not adversely affect the existing economic base of the community e.g., waterfront development designed to promote residential development might be inappropriate in a harbor area where the economy is dependent upon tourism and recreational fishing.

5. The action will not detract from views of the water and smaller harbor area, particularly where the visual quality of the area is an important component of the area's appeal and identity.
6. In applying the above guidelines, the information in harbor management plans being developed by local governments pursuant to Article 42 of the Executive Law and local laws that would implement them shall be considered.

## SECTION 3.2

# DEVELOPMENT POLICIES (CONT.)

### POLICY 5

**Encourage the location of development in areas where public services and facilities essential to such development are adequate.**

#### Tools Included in Policy 5:

- *Guidelines for Locating Development in Areas with Adequate Public Services and Facilities*
- *Definition of the Types of Development That Do Not Need to be Near or Within Areas of Concentrated Development*

### EXPLANATION OF POLICY #5

By its construction, taxing, funding and regulatory powers, government has become a dominant force in shaping the course of development. Through these government actions, development, particularly large-scale development, in the shorefront area will be encouraged to locate within, contiguous to, or in close proximity to, existing areas of concentrated development where infrastructure and public services are adequate, where topography, geology, and other environmental conditions are suitable for and able to accommodate development. In addition, the location of development should support efforts to enhance flood resiliency, stormwater management, and renewable energy.

This policy is intended to accomplish the following:

- strengthen existing residential, industrial and commercial centers;
- foster an orderly pattern of growth where outward expansion is occurring;
- increase the productivity of existing public services and moderate the need to provide new public services in outlying areas;
- preserve open space in sufficient amounts and where desirable
- foster energy conservation by encouraging proximity between home, work, and leisure activities;
- increase the resiliency of the municipalities to natural hazard events;
- support the transition of existing infrastructure into opportunities to promote renewable energy.

In certain urban areas where development is encouraged by this policy, the condition of existing public water and sewage infrastructure may necessitate improvements. Those State and local agencies charged with allocating funds for investments in water and sewer facilities should give high priority to the needs of such areas so that full advantage may be taken of the rich array of their other infrastructure components in promoting waterfront revitalization.

The following guidelines provide assistance in determining the appropriate locations for different types of development.

## SECTION 3.2

**DEVELOPMENT POLICIES** (CONT.)**POLICY 5 GUIDELINES FOR LOCATING DEVELOPMENT IN AREAS WITH ADEQUATE PUBLIC SERVICES AND FACILITIES**

For any action that would result in large scale development or an action which would facilitate or serve future development, a determination shall be made as to whether the action is within, contiguous to, or in close proximity to an area of concentrated development where infrastructure and public services are adequate. The following guidelines shall be used in making that determination:

1. Cities, built-up suburban towns and villages, and rural villages in the shorefront area are generally areas of concentrated development where infrastructure and public services are adequate.
2. Other locations in the shorefront area may also be suitable for development, if three or more of the following conditions prevail:
  - a. Population density of the area surrounding or adjacent to the proposed site exceeds 1,000 persons per square mile;
  - b. Fewer than 50% of the buildable sites (i.e., sites meeting lot area requirements under existing local zoning regulations) within one-mile radius of the proposed site are vacant;
  - c. Proposed site is served by or is near to public or private sewer and water lines;
  - d. Public transportation service is available within one mile of the proposed site; and
  - e. A significant concentration of commercial and/or industrial activity is within one-half mile of the proposed site.
3. The following points shall be considered in assessing the adequacy of an area's infrastructure and public services:
  - a. Streets and highways serving the proposed site can safely accommodate the peak traffic generated by the proposed land development;
  - b. Development's water needs (consumptive and firefighting) can be met by the existing water supply system;
  - c. Sewage disposal system can accommodate the wastes generated by the development;
  - d. Energy needs of the proposed land development can be accommodated by existing utility systems;
  - e. Stormwater runoff from the proposed site can be accommodated by on-site and/or off-site facilities;
  - f. Schools, police and fire protection, and health and social services are adequate to meet the needs of the population expected to live, work, shop, or conduct business in the area as a result of the development; and
  - g. Flood protection measures necessary to accommodate development.

## SECTION 3.2

# DEVELOPMENT POLICIES (CONT.)

### POLICY 5 DEFINITION OF THE TYPES OF DEVELOPMENT THAT DO NOT NEED TO BE NEAR OR WITHIN AREAS OF CONCENTRATED DEVELOPMENT

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It is recognized that certain forms of development may and/or should occur at locations which are not within or near areas of concentrated development. Thus, this development policy does not apply to the following types of development projects and activities.

1. Economic activities which depend upon sites at or near locations where natural resources are present, e.g., lumber industry, quarries.
2. Development which, by its nature, is enhanced by a non-urbanized setting, e.g., a resort complex, campgrounds, second home developments.
3. Development which is designed to be a self-contained activity, e.g., a small college, an academic or religious retreat.
4. Water dependent uses with site requirements not compatible with this policy or when alternative sites are not available.
5. Development which because of its isolated location and small scale has little or no potential to generate and/or encourage further land development.
6. Uses and/or activities which because of public safety consideration should be located away from populous areas.
7. Rehabilitation or restoration of existing structures and facilities.
8. Development projects which are essential to the construction and/or operation of the above uses and activities.

## SECTION 3.2

**DEVELOPMENT POLICIES** (CONT.)**POLICY 6**

**Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.**

**EXPLANATION OF POLICY #6**

For specific types of development activities, and in areas suitable for such development, State agencies and local governments participating in the Waterfront Revitalization of Coastal Areas and Inland Waterways Program will make every effort to coordinate and synchronize existing permit procedures and regulatory programs, as long as the integrity of the regulations' objectives is not jeopardized. These procedures and programs will be coordinated within each agency. Also, efforts will be made to ensure that each agency's procedures are synchronized with other agencies' procedures at each level of government. Finally, regulatory programs and procedures will be coordinated and synchronized between levels of government, and if necessary, legislative and/or programmatic changes will be recommended.

When proposing new regulations, an agency will determine the feasibility of incorporating the regulations within existing procedures, if this reduces the burden on a particular type of development and does not jeopardize the integrity of the regulations' objectives.

The intent of this policy is that by easing the process of obtaining permits in a discrete area of the WRA, developers' interest to invest within this area is incentivized. Once this concentrated effort has succeeded, stabilization and revitalization of surrounding areas is more likely to occur. Areas where expedited permit procedures may be suitable include: the State-owned parcel on the northwest corner of Court Street / Colesville Road in the Town of Kirkwood; the former BAE at 600 Main Street in the Town of Union; the Northgate Plaza in the Town of Chenango; Davis College in the Village of Johnson City, Lock 107 in the Town of Fenton, and Quaquaga Bridge in the Town of Colesville.

## SECTION 3.3

# FISH AND WILDLIFE POLICIES

**POLICY 7: Significant coastal fish and wildlife habitats will be protected, preserved, and where practical, restored so as to maintain their viability as habitats.**

**EXPLANATION OF POLICY #7:** Under the current conditions this policy does not apply to Broome County. This policy applies only to significant fish and wildlife habitats designated by the State and located in the State's coastal area.

### POLICY 8

**Protect fish and wildlife resources in the waterfront revitalization area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources.**

#### SUB-POLICY 8A:

**Protect fish and wildlife resources through sound invasive species management practices within the waterfront revitalization area.**

### EXPLANATION OF POLICIES #8 AND #8A

The handling (storage, transport, treatment and disposal) of the materials included on the Department of Environmental Conservation (DEC) hazardous wastes list is being strictly regulated in New York State to prevent their entry or introduction into the environment, particularly into the State's air, land, and waters. Such controls should effectively minimize possible contamination of and bio-accumulation in the State's fish and wildlife resources at levels that cause mortality or create physiological and behavioral disorders.

Other pollutants are those conventional wastes generated from point and non-point sources and not identified as hazardous wastes but controlled through other State laws. Additionally, an important issue in Broome County is the management of invasive species, a pollutant that may threaten the health of native ecosystems along waterways.

The following definitions provide additional clarification relevant to this policy.

#### Tools Included in Policy 8:

- *Definition of Hazardous Wastes*
- *Definition of Point and Non-Point Source Pollution*

## SECTION 3.3

# FISH AND WILDLIFE POLICIES (CONT.)

### **POLICY 8 DEFINITION OF HAZARDOUS WASTES**

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Hazardous wastes are unwanted by-products of manufacturing processes and are generally characterized as being flammable, corrosive, reactive, or toxic. More specifically, hazardous waste is defined in Environmental Conservation Law [§27-0901(3)] as “waste or combination of wastes which because of its quantity, concentration, or physical, chemical or infectious characteristics may: (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or otherwise managed.” A list of hazardous wastes (NYCRR Part 371) is provided by DEC.

### **POLICY 8 DEFINITION OF POINT AND NON-POINT SOURCE POLLUTION**

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As detailed in section 502(14) of the Clean Water Act, “point source” means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural storm water discharges and return flows from irrigated agriculture. According to New York State Department of Environmental Conservation (DEC), non-point source pollution comes from many sources and is caused by rainfall or snowmelt moving over and through the ground that picks up and carries away natural and human-made pollutants, depositing them into lakes, rivers, wetlands, coastal waters, and ground waters.

## SECTION 3.3

# FISH AND WILDLIFE POLICIES (CONT.)

### POLICY 9

**Expand recreational use of fish and wildlife resources in the waterfront revitalization area by increasing access to existing resources, supplementing existing stocks, and developing new resources.**

#### Tools Included in Policy 9:

- *Guidelines for Increasing Recreational Use of Fish and Wildlife Resources*

**POLICY 10: Further develop commercial finfish, shellfish, and crustacean resources in the inland waterway area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the State's seafood products, maintaining adequate stocks, and expanding aquaculture facilities.**

### EXPLANATION OF POLICY #9

Recreational uses of fish and wildlife resources include consumptive uses such as fishing and hunting, and non-consumptive uses such as wildlife photography, bird watching, and nature study. In the Broome County WRA, with 98 miles of designated inland waterways, to fully utilize these resources special consideration should be given to providing regular opportunities for ingress and egress along the shoreline.

Any efforts to increase recreational use of these resources will be made in a manner which ensures the protection of fish and wildlife resources in the waterfront revitalization area and which takes into consideration other activities dependent on these resources. Also, such efforts must be done in accordance with existing State law and in keeping with sound management considerations. Such considerations include biology of the species, carrying capacity of the resources, public demand, costs and available technology.

Priority access points are highlighted within the LWRS projects and include both minor and major water access points as well as waterfront access within community parks and along Levee Trails.

The following guidelines for increasing recreational use of fish and wildlife resources provide assistance in determining if actions are consistent with this policy.

**EXPLANATION OF POLICY #10:** Under the current conditions this policy does not apply to Broome County. This policy applies to areas with commercial fishing.

## SECTION 3.3

**FISH AND WILDLIFE POLICIES** (CONT.)**POLICY 9 GUIDELINES FOR INCREASING RECREATIONAL USE OF FISH AND WILDLIFE RESOURCES**

The following additional guidelines should be considered by State and local agencies as they determine the consistency of their proposed action with the above policy:

1. Consideration should be made by local and State agencies as to whether an action will impede existing or future utilization of the State's recreational fish and wildlife resources.
2. Efforts to increase access to recreational fish and wildlife resources should not lead to overutilization of that resource or cause impairment of the habitat. Sometimes such impairment can be more subtle than actual physical damage to the habitat. For example, increased human presence can deter animals from using the habitat area.
3. The impacts of increasing access to recreational fish and wildlife resources should be determined on a case-by-case basis, consulting the significant habitat narrative (see Policy 7) and/or conferring with a trained fish and wildlife biologist.
4. Any public or private sector initiatives to supplement existing stocks (e.g., stocking a stream with fish reared in a hatchery) or develop new resources (e.g., creating private fee-hunting or fee-fishing facilities) must be done in accord with existing State law.

## SECTION 3.4

# FLOODING AND EROSION HAZARDS POLICIES

### POLICY 11

**Buildings and other structures will be sited in the waterfront revitalization area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.**

### EXPLANATION OF POLICY #11

Flooding hazards are a significant concern in the WRA as Broome County saw major floods in 2006 and 2011, both of which were federally declared disasters. According to the Federal Emergency Management Agency (FEMA), 26 square miles of Broome County are within the Special Flood Hazard Area (SFHA). These areas have special flood, mudflow or flood-related erosion hazards.<sup>1</sup> Within this area, the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the purchase of flood insurance is mandatory. Each of the 24 jurisdictions in Broome County participate in the National Flood Insurance Program (NFIP) and, as part of the program, have adopted and enforce a floodplain management ordinance. These local ordinances include regulations to reduce future flood damage. Although local ordinances may include more specific regulations, it should be recognized that with this policy, in areas identified as floodways, no mobile homes shall be sited other than in existing mobile home parks.

Where human lives may be endangered by major storms, all necessary emergency preparedness measures should be taken, including disaster preparedness planning efforts such as the Broome County Hazard Mitigation Plan.

1

<https://www.fema.gov/glossary/special-flood-hazard-area-sfha>

## SECTION 3.4

# FLOODING AND EROSION HAZARDS POLICIES (CONT.)

## POLICY 12

**Activities or development in the waterfront revitalization area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.**

### SUB-POLICY 12A:

**Proper steep slope management will be undertaken to reduce public health, welfare and safety risks.**

## POLICY 13

**The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.**

### EXPLANATION OF POLICY #12 AND #12A

Beaches, barrier islands, bluffs, and other natural protective features help safeguard shorefront lands and property from damage, as well as reduce the danger to human life, resulting from flooding and erosion. Within Broome County, a natural feature that characterizes many areas within the WRA is steep slopes. Although steep slopes can contribute to area's scenic and aesthetic qualities, these features can also create public safety hazards and water quality issues, particularly when vegetation is removed.

Excavation of shorefront features, improperly designed structures, inadequate site planning, or other similar actions which fail to recognize their fragile nature and high protective values, lead to the weakening or destruction of those landforms. Activities or development in, or in proximity to, natural protective features must ensure that all such adverse actions are minimized.

### EXPLANATION OF POLICY #13

Erosion protection structures are widely used throughout the State's waterfront areas. Within Broome County, flood control structures include dams, floodwalls and levees. However, because of improper design, construction and maintenance standards, many fail to give the protection which they are presumed to provide. As a result, development is sited in areas where it is subject to damage or loss due to erosion. This policy will help ensure the reduction of such damage or loss.

## SECTION 3.4

# FLOODING AND EROSION HAZARDS POLICIES (CONT.)

### POLICY 14

**Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.**

### EXPLANATION OF POLICY #14

Erosion and flooding are processes which occur naturally. However, by our actions, humans can increase the severity and adverse effects of those processes, causing damage to, or loss of property, and endangering human lives. Those actions include: the use of erosion protection structures such as groins, or the use of impermeable docks which block the littoral transport of sediment to adjacent shorelands, thus increasing their rate of recession; the failure to observe proper drainage or land restoration practices, thereby causing runoff and the erosion and weakening of shorelands; and the placing of structures in identified floodways so that the base flood level is increased causing damage to otherwise hazard-free areas.

### POLICY 15

**Mining, excavation, or dredging in inland waterways shall not significantly interfere with the natural inland waterway processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.**

### EXPLANATION OF POLICY #15

Inland waterway processes, including the movement of beach materials by water, and any mining, excavation or dredging in nearshore or offshore waters which changes the supply and net flow of such materials can deprive shorelands of their natural regenerative powers. Such mining, excavation and dredging should be accomplished in a manner so as not to cause a reduction of supply, and thus an increase of erosion, to such shorelands. Offshore mining is a future alternative option to land mining for sand and gravel deposits which are needed to support building and other industries.

## SECTION 3.4

# FLOODING AND EROSION HAZARDS POLICIES (CONT.)

## POLICY 16

**Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.**

## EXPLANATION OF POLICY #16

Public funds are used for a variety of purposes on the State's shorelines. This policy recognizes the public need for the protection of human life and existing investment in development or new development which requires a location in proximity to the shorefront area or in adjacent waters to be able to function. However, it also recognizes the adverse impacts of such activities and development on the rate of erosion and on natural protective features and requires that careful analysis be made of such benefits and long-term costs prior to expending public funds.

Within the WRA three of the five dams, are considered high hazard dams according to the DEC. This classification means that the dam is located in an area where failure may cause loss of human life, serious damage to homes, industrial or commercial buildings, important public utilities, main highways or railroads and/or will cause extensive economic loss. These dams are downstream hazards in which excessive economic loss would occur as a direct result of dam failure. Special attention should be given to these structures in the application of this policy.

Additionally, according to the socio-demographic analysis, the population of the WRA is more vulnerable to the potential impacts of flooding and severe weather events, not only due to their proximity to dynamic waterways, but also in terms of social and economic indicators compared to the County as a whole. Therefore actions within the WRA should address impacts on this vulnerable population.

## SECTION 3.4

# FLOODING AND EROSION HAZARDS POLICIES (CONT.)

### POLICY 17

**Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.**

### EXPLANATION OF POLICY #17

This policy recognizes both the potential adverse impacts of flooding and erosion upon development and upon natural protective features in the inland waterway or coastal area, as well as the costs of protection against those hazards which structural measures entail.

“Non-structural measures” within identified flood hazard areas shall include, but not be limited to:

1. The avoidance of risk or damage from flooding by the siting of buildings outside the hazard area; and
2. The flood-proofing of buildings or their elevation above the base flood level.

This policy shall apply to the planning, siting, and design of proposed activities and development, including measures to protect existing activities and development. To ascertain consistency with the policy, it must be determined if any one, or a combination of, non-structural measures would afford the degree of protection appropriate both to the character and purpose of the activity or development, and to the hazard. If non-structural measures are determined to offer sufficient protection, then consistency with the policy would require the use of such measures, whenever possible.

In determining whether or not non-structural measures to protect against erosion or flooding will afford the degree of protection appropriate, an analysis, and if necessary, other materials such as plans or sketches of the activity or development, of the site and of the alternative protection measures should be prepared to allow an assessment to be made.

## SECTION 3.5

# GENERAL POLICY

### POLICY 18

**To safeguard the vital economic, social and environmental interests of the State and of its citizens, proposed major actions in the waterfront revitalization area must give full consideration to those interests and to the safeguards which the State has established to protect valuable inland waterway resource areas.**

### EXPLANATION OF POLICY #18

Proposed major actions may be undertaken in the waterfront revitalization area if they will not significantly impair valuable inland waterway resources, thus frustrating the achievement of the purposes of the safeguards which the State has established to protect those waters and resources. Proposed actions must take into account the social, cultural, economic and environmental interests of the State and its citizens in such matters that would affect natural resources, water levels and flows, shoreline damage, hydro-electric power generation, and recreation.

## SECTION 3.6

# PUBLIC ACCESS POLICIES

### POLICY 19

**Protect, maintain, and increase the level and types of access to public water related recreation resources and facilities.**

#### **SUB-POLICY 19A:**

**Incorporate the expansion of Broome County's network of trails to connect water-dependent and water-enhanced uses.**

#### **Tools Included in Policy 19:**

- *Guidelines for For Protecting, Maintaining, and Increasing the Level and Types of Access*
- *Definition of Public Access Terminology*

### **EXPLANATION OF POLICIES #19 AND #19 A**

This policy calls for achieving balance among the following factors: the level of access to a resource or facility, the capacity of a resource or facility, and the protection of natural resources. The imbalance among these factors is the most significant in the State's urban areas. Because this is often due to access-related problems, priority will be given to improving physical access to existing and potential shorefront recreation sites within the heavily populated urban shorefront areas of the State and to increasing the ability of urban residents to get to shorefront recreation areas by improved public transportation.

The particular water-related recreation resources and facilities which will receive priority for improved access are public beaches, boating facilities, fishing areas and waterfront parks. In addition, because of the greater competition for waterfront locations within urban areas, the Waterfront Revitalization of Coastal Areas and Inland Waterways Program will encourage mixed use areas and multiple use of facilities to improve access. Specific sites requiring access improvements and the relative priority the program will accord to each will be identified in the Public Access Planning Process.

Within Broome County there are 98 miles of inland waterways that provide great potential as recreational transportation corridors. To increase the opportunities for the waterways to be used by boaters and anglers, regular access for ingress and egress from the waterways must be provided. Furthermore, trails that parallel the river complement the use of these corridors as recreational transportation attractions and should be facilitated where feasible.

To assist in the application of this policy following provides definitions for public access and guidelines for protecting, maintaining, and increasing the level and types of access.

## SECTION 3.6

**PUBLIC ACCESS POLICIES** (CONT.)**POLICY 19 GUIDELINES FOR PROTECTING, MAINTAINING, AND INCREASING THE LEVEL AND TYPES OF ACCESS**

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

1. The existing access from adjacent or proximate public lands or facilities to public water related recreation resources and facilities shall not be reduced, nor shall the possibility of increasing access in the future from adjacent or proximate public lands or facilities to public water related recreation resources and facilities be eliminated, unless in the latter case, estimates of future use of these resources and facilities are too low to justify maintaining or providing increased public access, or unless such actions are found to be necessary by the public body having jurisdiction over such access as the result of a reasonable justification of the need to meet system-wide objectives.
2. Any proposed project to increase public access to public water-related recreation resources and facilities shall be analyzed according to the following factors:
  - a. The level of access to be provided should be in accord with estimated public use. If not, the proposed level of access to be provided shall be deemed inconsistent with the policy.
  - b. The level of access to be provided shall not cause a degree of use which would exceed the physical capability of the resource or facility. If this were determined to be the case, the proposed level of access to be provided shall be deemed inconsistent with the policy.
3. The State will not undertake or fund any project which increases access to a water-related resource or facility that is not open to all members of the public.
4. In their plans and programs for increasing public access to public water-related resources and facilities, State agencies shall give priority in the following order to projects located: within the boundaries of the Federal-Aid Metropolitan Urban Area and served by public transportation, within the boundaries of the Federal-Aid Metropolitan urban area but not served by public transportation; outside the defined Urban Area boundary and served by public transportation; and outside the defined Urban Area boundary but not served by public transportation.

## SECTION 3.6

# PUBLIC ACCESS POLICIES (CONT.)

### POLICY 19: DEFINITION OF PUBLIC ACCESS TERMINOLOGY

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The following is an explanation of the terms used in the guidelines for access to public water related recreation resources and facilities:

- a. Access - the ability and right of the public to reach and use public inland waterway lands and waters.
- b. Public water related recreation resources of facilities - all public lands or facilities that are suitable for passive or active recreation that requires either water or a waterfront location or is enhanced by a waterfront location.
- c. Public lands or facilities - lands or facilities held by State or local government in fee simple or less-than-fee simple ownership and to which the public has access or could have access, including underwater lands and the foreshore.
- d. A reduction in the existing level of public access - includes, but is not limited to, the following:
  - 1) The number of parking spaces at a public water-related recreation resource or facility is significantly reduced.
  - 2) The service level of public transportation to a public water-related recreation resource or facility is significantly reduced during peak season use and such reduction cannot be reasonably justified in terms of meeting system-wide objectives.
  - 3) Pedestrian access is diminished or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines, or similar linear facilities.
  - 4) There are substantial increases in the following: already existing special fares (not to include regular fares in any instance) of public transportation to a public water-related recreation resource or facility; and/or admission fees to such a resource or facility except where the public body having jurisdiction over such fares determines that such substantial fare increases are necessary and an analysis shows that such increases will significantly reduce usage by individuals or families and incomes below the State government established poverty level.
- e. An elimination of the possibility of increasing public access in the future includes, but is not limited to, the following:
  - 1) Construction of public facilities which physically prevent the provision, except at great expense, of convenient public access to public water-related recreation resources and facilities
  - 2) Sale, lease, or other transfer of public lands that could provide public access to a public water-related recreation resource or facility
  - 3) Construction of private facilities which physically prevent the provision of convenient public access to public water-related recreation resources or facilities from public lands and facilities

## SECTION 3.6

**PUBLIC ACCESS POLICIES** (CONT.)**POLICY 20**

**Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.**

**Tools Included in Policy 20:**

- *Guidelines for For Providing Access to the Foreshore*
- \* *Definition of Public Access Terminology*

**EXPLANATION OF POLICY #20**

In inland waterway areas where there are little or no recreation facilities providing specific water-related recreational activities, access to the publicly-owned lands along the inland waterway at large should be provided for numerous activities and pursuits which require only minimal facilities for their enjoyment. Such access would provide for walking along a beach or a city waterfront or to a vantage point from which to view the shoreline. Similar activities requiring access would include bicycling, bird watching, photography, nature study, beachcombing, fishing and hunting.

For those activities, there are several methods of providing access which will receive priority attention from the Waterfront Revitalization of Coastal Areas and Inland Waterways Program. These include: the development of a waterfront trails system; the provision of access across transportation facilities to the waterfront; the improvement of access to waterfronts in urban areas; and the promotion of mixed and multi-use development.

While such publicly-owned lands referenced in the policy shall be retained in public ownership, traditional sales of easements on lands underwater to adjacent onshore property owners are consistent with this policy, provided such easements do not substantially interfere with continued public use of the public lands on which the easement is granted. Also, public use of such publicly-owned underwater lands and lands immediately adjacent to the shore shall be discouraged where such use would be inappropriate for reasons of public safety, military security, or the protection of fragile inland waterway resources.

The regulation of projects and structures, proposed to be constructed in or over lands underwater, is necessary to responsibly manage such lands, to protect vital assets held in the name of the people of the State, to guarantee common law and sovereign rights, and to ensure that waterfront owners' reasonable exercise of riparian rights and access to navigable waters shall be consistent with the public interest in reasonable use and responsible management of waterways and such public lands for the purposes of navigation, commerce, fishing, bathing, recreation, environmental and aesthetic protection, and access to the navigable waters and lands underwater of the State.

The following guidelines and definitions for providing access to the foreshore assist in apply this policy.

## SECTION 3.6

# PUBLIC ACCESS POLICIES (CONT.)

### POLICY 20 GUIDELINES FOR PROVIDING ACCESS TO THE FORESHORE

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

1. Existing access from adjacent or proximate public lands or facilities to existing public inland waterway lands and/or waters shall not be reduced, nor shall the possibility of increasing access in the future from adjacent or nearby public lands or facilities to public inland waterway lands and/or waters be eliminated, unless such actions are demonstrated to be of overriding regional or Statewide public benefit or, in the latter case, estimates of future use of these lands and waters are too low to justify maintaining or providing increased access.
2. The existing level of public access within public inland waterway lands or waters shall not be reduced or eliminated.
3. Public access from the nearest public roadway to the shoreline and along the inland waterway shall be provided by new land use or development, except where (a) it is inconsistent with public safety, military security, or the protection of identified fragile inland waterway resources; (b) adequate access exists within one-half mile; or (c) agriculture would be adversely affected. Such access shall not be required to be open to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the access way.
4. The State will not undertake or directly fund any project which increases access to a water-related resource or facility that is not open to all members of the public.
5. In their plans and programs for increasing public access, State agencies shall give priority in the following order to projects located: within the boundaries of the Federal-Aid Metropolitan Urban Area and served by public transportation; within the Federal-Aid Metropolitan Urban Area but not served by public transportation; outside the defined Urban Area boundary and served by public transportation; and outside the defined Urban Area boundary but not served by public transportation.
6. Proposals for increased public access to inland waterway lands and waters shall be analyzed according to the following factors:
  - a. The level of access to be provided should be in accord with estimated public use. If not, the proposed level of access to be provided shall be deemed inconsistent with the policy.
  - b. The level of access to be provided shall not cause a degree of use which would exceed the physical capability of the inland waterway lands or waters. If this were determined to be the case, the proposed level of access to be provided shall be deemed inconsistent with the policy.
7. In making any grant, lease, permit, or other conveyance of land now or formerly underwater, there shall be reserved such interests or attached such conditions to preserve the public interest in the use of state-owned lands underwater and waterways for navigation, commerce, fishing, bathing, recreation, environmental protection, and access to the navigable waters of the state. In particular, the granting of publicly owned underwater or formerly underwater lands to private entities will be limited to exceptional circumstances only.

## SECTION 3.6

**PUBLIC ACCESS POLICIES** (CONT.)**POLICY 20: DEFINITION OF PUBLIC ACCESS TERMINOLOGY**

The following is an explanation of the terms used in the guidelines for public access:

- a. Access - the ability and right of the public to reach and use public inland waterway lands and waters.
- b. Public lands or facilities - lands or facilities held by State or local government in fee simple or less-than-fee simple ownership and to which the public has access or could have access, including underwater lands and the foreshore.
- c. A reduction in the existing level of public access - includes, but is not limited to, the following:
  - 1) Access is diminished or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines, or similar linear facilities.
  - 2) Access is diminished or blocked completely by public or private development.
- d. An elimination of the possibility of increasing public access in the future includes, but is not limited to, the following:
  - 1) Construction of public facilities which physically prevent the provision, except at great expense, of convenient public access to public inland waterway lands and /or waters
  - 2) Sale, lease, or other conveyance of public lands that could provide public access to public inland waterway lands and/or waters
  - 3) Construction of private facilities which physically prevent the provision of convenient public access to public inland waterway lands and/or waters from public lands and facilities

## SECTION 3.7

# RECREATION POLICIES

### POLICY 21

**Water dependent and water enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the shorefront.**

#### SUB-POLICY 21A:

**Water dependent and water enhanced recreation within the WRA will be coordinated as a cohesive inland waterway resource.**

### EXPLANATION OF POLICIES #21 AND #21A

Water-related recreation includes such obviously water dependent activities as boating, swimming, and fishing as well as certain activities which are enhanced by a shorefront location and increase the general public's access to the shorefront such as pedestrian and bicycle trails, picnic areas, scenic overlooks and passive recreation areas that take advantage of shorefront scenery.

Provided the development of water-related recreation is consistent with the preservation and enhancement of such important waterfront revitalization area resources as fish and wildlife habitats, aesthetically significant areas, historic and cultural resources, agriculture and significant mineral and fossil deposits, and provided demand exists, water-related recreation development is to be increased and such uses shall have a higher priority than any non-water-dependent uses, including non-water-related recreation uses. In addition, water dependent recreation uses shall have a higher priority over water-enhanced recreation use. Determining a priority among water-dependent uses will require a case by case analysis.

With a vast span of shoreline along the Chenango River, Delaware River, Susquehanna River, Tioughnioga River and Nanticoke Creek, water-related recreation is dispersed throughout the WRA. A coordinated approach to developing these resources will provide for a more cohesive resource to attract residents and visitors.

Among priority areas for increasing water-related recreation opportunities are those areas where access to the recreation opportunities of the shorefront can be provided by new or existing public transportation services and those areas where the use of the shore is severely restricted by highways, railroads, industry, or other forms of existing intensive land use or development. The Department of State, working with the Office of Parks, Recreation, and Historic Preservation and with local governments, will identify communities whose use of the shore has been so restricted and those sites shoreward of such developments which are suitable for recreation and can be made accessible. Priority shall be given to recreational development of such lands.

## SECTION 3.7

**RECREATION POLICIES** (CONT.)**EXPLANATION OF POLICIES #21 AND #21A (CONT.)**

The siting or design of new public development in a manner which would result in a barrier to the recreational use of a major portion of a community's shore should be avoided as much as practicable. Among the types of water dependent recreation, provision of adequate boating services to meet future demand is to be encouraged by this Program. The siting of boating facilities must be consistent with preservation and enhancement of other inland waterway resources and with their capacity to accommodate demand. The provision of new public boating facilities is essential in meeting this demand, but such public actions should avoid competition with private boating development. Boating facilities will, as appropriate, include parking, park-like surroundings, toilet facilities, and pump-out facilities. There is a need for a better positional pattern of boating facilities to correct problems of overused, insufficient, or improperly sited facilities.

Water-related off-road recreational vehicle use is an acceptable activity; provided no adverse environmental impacts occur. Where adverse environmental impact will occur, mitigating measures will be implemented, where practicable to minimize such adverse impacts. If acceptable mitigation is not practicable, prohibition of the use by off-road recreational vehicles will be posted and enforced.

## SECTION 3.7

# RECREATION POLICIES (CONT.)

### POLICY 22

**Development when located adjacent to the shore will provide for water-related recreation whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development.**

### EXPLANATION OF POLICY #22

Many developments present practical opportunities for providing recreation facilities as an additional use of the site or facility. Therefore, whenever developments are located adjacent to the shore they should to the fullest extent permitted by existing law provide for some form of water-related recreation use unless there are compelling reasons why any form of such recreation would not be compatible with the development, or a reasonable demand for public use cannot be foreseen.

The types of development which can generally provide water-related recreation as a multiple-use include, but are not limited to:

- parks
- highways
- power plants
- utility transmission rights of way
- sewage treatment facilities
- mental health facilities\*
- hospitals\*
- prisons\*
- schools, universities\*
- military facilities\*
- nature preserves\*
- large residential subdivisions (50 units)
- shopping centers
- office buildings

*\* The types of recreation uses likely to be compatible with these facilities are limited to the more passive forms, such as trails or fishing access. In some cases, land areas not directly or immediately needed by the facility could be used for recreation.*

## SECTION 3.7

**RECREATION POLICIES** (CONT.)**EXPLANATION OF POLICY #22 (CONT.)**

Prior to taking action relative to any development, State agencies should consult with the State Office of Parks, Recreation, and Historic Preservation, and if there is an approved local waterfront program, with the municipality in which the development is to locate, to determine appropriate recreation uses. The agency should provide OPRHP and the municipality with the opportunity to participate in project planning.

Appropriate recreational uses which do not require any substantial additional construction shall be provided at the expense of the project sponsor provided the cost does not exceed 2% of total project cost.

In determining whether compelling reasons exist which would make inadvisable recreation as a multiple use, safety considerations should reflect a recognition that some risk is acceptable in the use of recreation facilities.

Whenever a proposed development would be consistent with LWRS policies and the development could, through the provision of recreation and other multiple uses, significantly increase public use of the shore, then such development should be encouraged to locate adjacent to the shore (this situation would generally only apply within the more developed portions of urban areas).

## SECTION 3.8

# HISTORIC AND SCENIC RESOURCES POLICIES

### POLICY 23

**Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities, or the Nation.**

#### Tools Included in Policy 23:

- *Definition of Significant Adverse Change*

### EXPLANATION OF POLICY #23

Among the most valuable of the State's man-made resources are those structures or areas which are of historic, archaeological, or cultural significance. The protection of these structures must involve a recognition of their importance by all agencies and the ability to identify and describe them. Protection must include concern not just with specific sites but with areas of significance, and with the area around specific sites. The policy is not to be construed as a passive mandate but must include active efforts, when appropriate, to restore or revitalize through adaptive reuse. While the program is concerned with the preservation of all such resources within the waterfront revitalization area it will actively promote the preservation of historic and cultural resources which have a waterfront relationship.

The structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities, or the Nation comprise the following resources:

1. A resource, which is in a federal or State park established, among other reasons, to protect and preserve the resource.
2. A resource on, nominated to be on, or determined eligible to be on the National or State Registers of Historic Places.
3. A resource on or nominated to be on the State Nature and Historic Preserve Trust.
4. An archaeological resource which is on the State Department of Education's inventory of archaeological sites.
5. A local landmark, park, or locally designated historic district which is located within the boundary of an approved Local Waterfront Revitalization Strategy.
6. A resource that is a significant component of a New York State Heritage Area.

Within Broome County these resources include a variety of resources listed on the National and State Registers of Historic Places as well as the New York State designated Susquehanna Heritage Area.

**EXPLANATION OF POLICY #23 (CONT.)**

All practicable means to protect structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities or the Nation shall be deemed to include the consideration and adoption of any techniques, measures, or controls to prevent a significant adverse change to such significant structures, districts, areas or sites.

This policy shall not be construed to prevent the construction, reconstruction, alteration, or demolition of any building, structure, earthworks, or component thereof of a recognized historic, cultural or archaeological resource which has been officially certified as being imminently dangerous to life or public health. Nor shall the policy be construed to prevent the ordinary maintenance, repair, or proper restoration according to the U.S. Department of Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" of any building, structure, site or earthwork, or component thereof of a recognized historic, cultural or archaeological resource which does not involve a significant adverse change to the resource, as detailed in the Policy 23 Definition of Significant Adverse Change.

To provide additional clarification of this policy, the following provides a detailed definition of significant adverse change:

## SECTION 3.8

# HISTORIC AND SCENIC RESOURCES POLICIES (CONT.)

### POLICY 23 DEFINITION OF SIGNIFICANT ADVERSE CHANGE

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A significant adverse change includes but is not limited to:

1. Alteration of or addition to one or more of the architectural, structural, ornamental or functional features of a building, structure, or site that is a recognized historic, cultural, or archaeological resource, or component thereof. Such features are defined as encompassing the style and general arrangement of the exterior of a structure and any original or historically significant interior features including type, color and texture of building materials, entry ways and doors, fenestration, lighting fixtures, roofing, sculpture and carving, steps, rails, fencing, windows, vents and other openings, grillwork, signs, canopies, and other appurtenant fixtures and, in addition, all buildings, structures, outbuildings, walks, fences, steps, topographical features, earthworks, paving and signs located on the designated resource property. (To the extent they are relevant, the Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" shall be adhered to.)
2. Demolition or removal in full or part of a building, structure, or earthworks that is a recognized historic, cultural, or archaeological resource or component thereof, to include all those features described in (a) above plus any other appurtenant fixtures associated with a building, structure or earthwork.
3. All proposed actions within 500 feet of the perimeter of the property boundary of the historic, architectural, cultural, or archaeological resource and all actions within an historic district that would be incompatible with the objective of preserving the quality and integrity of the resource. Primary considerations to be used in making

judgment about compatibility should focus on the visual and location relationship between the proposed action and the special character of the historic, cultural, or archaeological resource. Compatibility between the proposed action and the resource means that the general appearance of the resource should be reflected in the architectural style, design material, scale, proportion, composition, mass, line, color, texture, detail, setback, landscaping and related items of the proposed actions. With historic districts, this would include infrastructure improvements or changes, such as street and sidewalk paving, street furniture and lighting.

This policy shall not be construed to prevent the construction, reconstruction, alteration, or demolition of any building, structure, earthworks, or component thereof of a recognized historic, cultural or archaeological resource which has been officially certified as being imminently dangerous to life or public health. Nor shall the policy be construed to prevent the ordinary maintenance, repair, or proper restoration according to the U.S. Department of Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" of any building, structure, site or earthwork, or component thereof of a recognized historic, cultural or archaeological resource which does not involve a significant adverse change to the resource, as defined above.

## SECTION 3.8

# HISTORIC AND SCENIC RESOURCES POLICIES (CONT.)

**POLICY 24: Prevent impairment of scenic resources of statewide significance.**

## EXPLANATION OF POLICY #24

Under the current conditions this policy does not apply to Broome County. This policy applies only to scenic resources designated as having statewide significance.

## POLICY 25

**Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the waterfront revitalization area.**

### Tools Included in Policy 25:

- *Guidelines for Protecting, Restoring or Enhancing the Overall Scenic Quality*

## EXPLANATION OF POLICY #25

When considering a proposed action, agencies shall ensure that the action would be undertaken so as to protect, restore or enhance the overall scenic quality of the waterfront revitalization area. Within Broome County, scenic resources are present throughout the WRA and include overlooks panoramic views, distant views, tunnel effect and enclosed view.

Activities which could impair or further degrade scenic quality are: (i) the irreversible modification of geologic forms; the destruction or removal of vegetation; the modification, destruction, or removal of structures, whenever the geologic forms, vegetation or structures are significant to the scenic quality of an identified resource; and (ii) the addition of structures which because of siting or scale will reduce identified views or which because of scale, form, or materials will diminish the scenic quality of an identified resource.

The following guidelines for protecting, restoring or enhancing the overall scenic quality assist in determining consistency with this policy.

## SECTION 3.8

# HISTORIC AND SCENIC RESOURCES POLICIES (CONT.)

### POLICY 25 GUIDELINES FOR PROTECTING, RESTORING OR ENHANCING THE OVERALL SCENIC QUALITY

The following siting and facility-related guidelines are to be used to achieve this policy, recognizing that each development situation is unique and that the guidelines will have to be applied accordingly.

Guidelines include:

- siting structures and other development such as highways, power lines, and signs, back from shorelines or in other inconspicuous locations to maintain the attractive quality of the shoreline and to retain views to and from the shore;
- clustering or orienting structures to retain views, save open space and provide visual organization to a development;
- incorporating sound, existing structures (especially historic buildings) into the overall development scheme;
- removing deteriorated and/or degrading elements;
- maintaining or restoring the original land form, except when changes screen unattractive elements and/or add appropriate interest;
- maintaining or adding vegetation to provide interest, encourage the presence of wildlife, blend structures into the site, and obscure unattractive elements, except when selective clearing removes unsightly, diseased or hazardous vegetation and when selective clearing creates views of inland waterways;
- using appropriate materials, in addition to vegetation, to screen unattractive elements;
- using appropriate scales, forms and materials to ensure that buildings and other structures are compatible with and add interest to the landscape.

More emphasis may need to be placed on removal of existing elements, especially those which degrade, and on addition of new elements or other changes which enhance. Removal of vegetation at key points to improve visual access to inland waterways is one such change which might be expected to enhance scenic quality.

## SECTION 3.9

## AGRICULTURAL LANDS POLICY

## POLICY 26

**Conserve and protect agricultural lands in the waterfront revitalization area.**

## Tools Included in Policy 26:

- *Definition of the State Map of Important Agricultural Lands*
- *Definition of Facilities and Activities That Do Not Have an Adverse Effects on Preservation of Agricultural Lands*
- *Guidelines For Determining If There is a Significant Loss of Important Agricultural Land*
- *Guidelines For Determining if Action is of Overriding Regional or Statewide Benefit*
- *Guidelines For Minimization of Non-Agricultural Actions on Agricultural Lands*

## EXPLANATION OF POLICY #26

The first step in conserving agricultural lands is the identification of such lands. Approximately 25% of the WRA is within an agricultural district as is illustrated in the Existing Land Uses: Agricultural Districts (2011) map of the LWRS. More specifically, there are two primary clusters of farmland within the WRA, a cluster along the Tioughnioga River and the upper reaches of the Chenango River and a cluster along the upper Susquehanna River.

Given the Program's application to a narrow strip of land, implementing a policy of promoting agricultural use of land must, to be practical, concentrate on controlling the replacement of agricultural land uses with non-agricultural land use as the result of some public action. The many other factors such as markets, taxes, and regulations, which influence the viability of agriculture in a given area, can only be addressed on a Statewide or national basis.

The Program policy requires a concern for the loss of any important agricultural land. However, the primary concern must be with the loss of agricultural land when that loss would have a significant effect on an agricultural area's ability to continue to exist, to prosper, and even to expand. A series of determinations are necessary to establish whether a public action is consistent with the conservation and protection of agricultural lands, or whether it is likely to be harmful to the health of an agricultural area. In brief, these determinations are as follows: First, it must be determined whether a proposed public action would result in the loss of important agricultural lands as mapped. If it would not result, either directly or indirectly, in the loss of identified important agricultural lands, then the action is consistent with the policy on agriculture. If it is determined that the action would result in a loss of identified important agricultural lands, but that loss would not have an adverse effect of the viability of agriculture in the surrounding area, then the action may also be consistent with this policy. However, in that case, the action must be undertaken in a manner that would minimize the loss of important farmland. If the action is determined to result in a significant loss of important agricultural land, that is if the loss is to a degree sufficient to adversely affect surrounding agriculture's viability -- its ability to continue to exist, to prosper, and even to expand -- then the action is not consistent with this agriculture policy.

The following definitions and guidelines define more fully what must be considered in making the above determinations:

## SECTION 3.9

# AGRICULTURAL LANDS POLICY (CONT.)

### POLICY 26 DEFINITION OF STATE MAP OF IMPORTANT AGRICULTURAL LANDS

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The Department of State is mapping all important agricultural lands within the State. The following criteria have been used to prepare the maps, and the mapped information will be incorporated in the New York State Coastal Resources Inventory and on the Coastal Area Map.

Land meeting any of the following criteria is being mapped.

1. Land which meets the definition of the U.S. Department of Agriculture as being prime farmland, unique farmland, or farmland of statewide importance.
  - a. Prime farmland is defined by USDA Soil Conservation Service in CRF #7 Agriculture Part 657.5(a), January 1979. A list of the soil associations that meet this definition has been prepared for each county.
  - b. Unique farmland is defined by USDASCS in CRF #7 Agriculture Part 657.5(b). In the coastal area of New York State all fruit and vegetable farming meets the terms of the definition.
  - c. Farmland of Statewide importance is defined by USDASCS in CRF #7 Agriculture Part 656.5(c). Lists of soil associations which constitute farmland of statewide importance have been prepared for each county.
2. Active farmland within Agricultural Districts. The maps of each Agricultural District show land committed by farmers. This is the land that will be mapped as active farmland. The district boundary will also be shown.
3. Areas identified as having high economic viability for farming. Any farm not identified above in 1 and/or 2, and which is located in an area identified as having "high viability" on the map entitled "Economic Viability of Farm Areas" prepared by the Office of Planning Coordination in May, 1969. This would be the basis for initial identification of areas having high economic viability for farming. Areas will be added and/or deleted based on comments from the agricultural community.
4. Areas adjacent to land identified above in 1, when are being farmed and are part of a farm with identified important agricultural lands.
5. Prime farmland, unique farmland, and farmland of statewide significance will not be identified as important agricultural land whenever it occurs as parcels of land less than 25 acres in size and these small parcels are not within a mile of areas of active farming.

### POLICY 26 DEFINITION OF FACILITIES AND ACTIVITIES THAT DO NOT HAVE AN ADVERSE EFFECTS ON PRESERVATION OF AGRICULTURAL LANDS

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The following types of facilities and activities should not be construed as having adverse effects on the preservation of agricultural land:

1. Farm dwellings, barns, silos, and other accessory uses and structures incidental to agricultural production or necessary for farm family supplemental income.
2. Agribusiness development, which includes the entire structure of local support services and commercial enterprises necessary to maintain an agricultural operation, e.g., milk hauler, grain dealer, farm machinery dealer, veterinarian, food processing plants.

## SECTION 3.9

**AGRICULTURAL LANDS POLICY** (CONT.)**POLICY 26 GUIDELINES FOR DETERMINING IF THERE IS A SIGNIFICANT LOSS OF IMPORTANT AGRICULTURAL LAND**

A public action would be likely to significantly impair the viability of an agricultural area in which identified important agricultural lands are located if:

1. The action would occur on identified important agricultural land and would:
  - a. Consume more than 10% of the land of an active farm containing such identified important agricultural lands
  - b. Consume a total of 100 acres or more of identified important agricultural land, or
  - c. Divide an active farm with identified important agricultural land into two or more parts, thus impeding efficient farm operation
2. The action would result in environmental changes which may reduce the productivity or adversely affect the quality of the product of any identified important agricultural lands.
3. The action would create real estate market conditions favorable to the conversion of large areas of identified important agricultural land to non-agricultural uses. Such conditions may be created by:
  - a. Public water or sewer facilities to serve non-farm structures
  - b. Transportation, improvements, except for maintenance of, and safety improvements to, existing facilities that serve non-farm or non-farm related development
  - c. Major non-agribusiness commercial development adjacent to identified agricultural lands
  - d. Major public institutions
  - e. Residential uses other than farm dwellings
  - f. Any change in land use regulations applying to agricultural land which would encourage or allow uses incompatible with the agricultural use of the land

## SECTION 3.9

# AGRICULTURAL LANDS POLICY (CONT.)

### POLICY 26 GUIDELINES FOR DETERMINING IF ACTION IS OF OVERRIDING REGIONAL OR STATEWIDE BENEFIT

In determining whether an action that would result in the loss of farmland is of overriding regional or statewide benefit, the following factors should be considered: For an action to be considered overriding, it must be shown to provide significantly greater benefits to the region or State than are provided by the affected agricultural area (not merely the land directly affected by the action). In determining the benefits of the affected agriculture to the region or State, consideration must be given to its social and cultural value, its economic viability, its environmental benefits, its existing and potential contribution to food or fiber production in the State and any State food policy, as well as its direct economic benefits.

1. An agricultural area is an area predominantly in farming and in which the farms produce similar products and/or rely on the same agribusiness support services and are to be a significant degree economically interdependent. At a minimum, this area should consist of at least 500 acres of identified important agriculture land. For the purpose of analyzing impacts of any action on agriculture, the boundary of such area need not be restricted to land within the waterfront revitalization area. If the affected agricultural lands lie within an agricultural district then, at a minimum, the agricultural area should include the entire agricultural district.
2. In determining the benefits of an agricultural area, its relationship to agricultural lands outside the area should also be considered.
3. The estimate of the economic viability of the affected agricultural area should be based on an assessment of:
  - a. soil resources, topography, conditions of climate and water resources
  - b. availability of agribusiness and other support services, and the level and condition of investments in farm real estate, livestock and equipment
  - c. the level of farming skills as evidenced by income obtained, yield estimates for crops, and costs being experienced with the present types and conditions of buildings, equipment, and cropland
  - d. use of new technology and the rates at which new technology is adopted
  - e. competition from substitute products and other farming regions and trends in total demand for given products
  - f. patterns of farm ownership for their effect on farm efficiency and the likelihood that farms will remain in use

## SECTION 3.9

**AGRICULTURAL LANDS POLICY** (CONT.)**POLICY 26 GUIDELINES FOR DETERMINING IF ACTION IS OF  
OVERRIDING REGIONAL OR STATEWIDE BENEFIT** (CONT.)

4. The estimate of the social and cultural value of farming in the area should be based on an analysis of:
  - a. the history of farming in the area
  - b. the length of time farms have remained in one family
  - c. the degree to which farmers in the area share a cultural or ethnic heritage
  - d. the extent to which products are sold and consumed locally
  - e. the degree to which a specific crop(s) has become identified with a community
5. An estimate of the environmental benefits of the affected agriculture should be based on analysis of:
  - a. the extent to which the affected agriculture as currently practiced provides a habitat or food for wildlife
  - b. the extent to which a farm landscape adds to the visual quality of an area
  - c. any regional or local open space plans, and degree to which the open space contributes to air quality
  - d. the degree to which the affected agriculture does, or could, contribute to the establishment of a clear edge between rural and urban development

## SECTION 3.9

# AGRICULTURAL LANDS POLICY (CONT.)

### POLICY 26 GUIDELINES FOR MINIMIZATION OF NON-AGRICULTURAL ACTIONS ON AGRICULTURAL LANDS

Whenever a proposed action is determined to have an insignificant adverse effect on identified important agricultural land or whenever it is permitted to substantially hinder the achievement of the policy according to DOS regulations, Part 600, or as a result of the findings of an EIS, then the required minimization should be undertaken in the following manner:

1. The proposed action shall, to the extent practicable, be sited on any land not identified as important agricultural, or, if it must be sited on identified important agricultural land, sited to avoid classes of agricultural land according to the following priority:
  - a. prime farmland in orchards or vineyards
  - b. unique farmland in orchard or vineyards
  - c. other prime farm land in active farming
  - d. other unique farmland
  - e. farmland of Statewide importance in active farming.
  - f. active farmland identified as having high economic viability
  - g. prime farmland not being farmed
  - h. farmland of Statewide importance not being farmed
2. To the extent practicable, agricultural use of identified important agricultural land not directly necessary for the operation of the proposed non-agricultural action should be provided for through such means as lease arrangements with farmers, direct undertaking of agriculture, or sale of surplus land to farmers. Agricultural use of such land shall have priority over any other proposed multiple use of the land.

## SECTION 3.10

# ENERGY AND ICE MANAGEMENT POLICIES

## POLICY 27

**Decisions on the siting and construction of major energy facilities in the shorefront area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.**

## EXPLANATION OF POLICY #27

New York's overall annual energy demand has begun to flatten over time, in part due to the success of State and utility energy efficiency programs. However, peak load (the highest amount of energy consumption in a given year) has continued to increase at a more rapid pace. Renewable power sources—hydro, solar, wind, and other carbon-free solutions—also continue to grow as a share of the total energy produced in the State. Significant investments in the billions of dollars are needed to replace New York's aging electric transmission and distribution infrastructure just to meet currently projected energy demand. To respond to these significant shifts in the State's energy infrastructure, State energy policies are being designed to maintain energy system reliability during peak load in ways that improve the grid's overall system efficiency, from both energy transmission and capital investment perspectives.

The New York State energy planning process provides a comprehensive framework for improving the State's energy system, addressing issues such as environmental impacts, resiliency, and affordability. Key areas of focus for New York's energy planning and implementation policies include integration of renewable energy generation; local energy generation that can foster both economic prosperity and environmental stewardship; seeking innovative energy solutions across the State's public facilities and operations; increasing energy efficiency; and decreasing greenhouse gas emissions. New York's energy policy is also central to how the State responds to the challenges presented by a changing climate. New York State's energy planning recognizes that extreme weather events demand more resilient energy infrastructure, and that climate change presents both challenges and opportunities to lead and innovate. A bronze certified Climate Smart Community (CSC), Broome County is committed to addressing energy efficiency and other issues to reduce greenhouse gas emissions and adapt to a changing climate. Furthermore, Broome County and several communities within the County participate in the New York State Energy Research and Development Authority (NYSERDA) Clean Energy Communities (CEC) program. Broome County, as well as the City of Binghamton, the Town of Windsor, the Town of Dickinson, the Village of Johnson City, the Village of Endicott and the Village of Whitney Point, are designated Clean Energy Communities (CEC). These communities have completed the program's high-impact actions to save energy and improve the environment.

## SECTION 3.10

# ENERGY AND ICE MANAGEMENT POLICIES (CONT.)

### EXPLANATION OF POLICY #27 (CONT.)

A determination of public need for energy is the first step in the process for siting new facilities. The directives for determining this need are contained primarily in Article 6 of the New York State Energy Law. That Article requires the preparation of a State Energy Plan. With respect to transmission lines and the siting of major electric generating facilities, Articles 7 and 10 of the State's Public Service Law require additional forecasts and establish the basis for determining the compatibility of these facilities with the environment and the necessity for providing additional electric capacity. The policies derived from the siting regulations under these Articles are entirely consistent with the general coastal zone policies derived from other laws, particularly the regulations promulgated pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Law. That law is used for the purposes of ensuring consistency with the Coastal Management Program.

The Department of State will present testimony for the record during relevant certification proceedings under Articles 7 and 10 of the Public Service Law when appropriate; and use the State SEQR and DOS regulations to ensure that decisions regarding other proposed energy facilities (not subject to Articles 7 and 10 of the Public Service Law) that would affect the shorefront area are consistent with LWRS policies.

## SECTION 3.10

# ENERGY AND ICE MANAGEMENT POLICIES (CONT.)

## POLICY 28

**Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats or increase shoreline erosion or flooding.**

## EXPLANATION OF POLICY #28

Prior to undertaking actions required for ice management, an assessment must be made of the potential effects of such actions upon the production of hydro-electric power, fish and wildlife and their habitats as will be identified in Coastal Area Maps, flood levels and damage, rates of shoreline erosion damage, and upon natural protective features.

Following such an examination, adequate methods of avoidance or mitigation of such potential effects must be utilized if the proposed action is to be implemented.

**POLICY 29: The development of offshore uses and resources, including renewable energy resources, shall accommodate New York's long-standing ocean and Great Lakes industries, such as commercial and recreational fishing and maritime commerce, and the ecological functions of habitats important to New York.**

## EXPLANATION OF POLICY #29

Under the current conditions this policy does not apply to Broome County.

## SECTION 3.11

# WATER AND AIR RESOURCES POLICIES

### POLICY 30

**Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into inland waterways will conform to State and National water quality standards.**

\* *Refer to Policy 8 for Definition of Hazardous Wastes*

### POLICY 31

**State policies and management objectives of approved Local Waterfront Revitalization Strategys will be considered while reviewing inland waterway classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.**

### EXPLANATION OF POLICY #30

Municipal, industrial and commercial discharges include not only “end-of-the pipe” discharges into surface and groundwater but also plant site runoff, leaching, spillages, sludge and other waste disposal, and drainage from raw material storage sites. Also, the regulated industrial discharges are both those which directly empty into receiving inland waterways and those which pass through the municipal treatment systems before reaching the State’s waterways.

### EXPLANATION OF POLICY #31

Pursuant to the Federal Clean Water Act of 1977 (PL 95-217) the State has classified its coastal and other waters in accordance with considerations of best usage in the interest of the public and has adopted water quality standards for each class of waters. These classifications and standards are reviewable at least every three years for possible revision or amendment. Local Waterfront Revitalization Strategys and State LWRS policies shall be factored into the review process for inland waterways. However, such consideration shall not affect any water pollution control requirement established by the State pursuant to the federal Clean Water Act.

The State has identified certain stream segments as being either “water quality limiting” or “effluent limiting.” Waters not meeting State standards and which would not be expected to meet these standards even after applying “best practicable treatment” to effluent discharges are classified as “water quality limiting.” Those segments meeting standards or those expected to meet them after application of “best practicable treatment” are classified as “effluent limiting,” and all new waste discharges must receive “best practicable treatment.” However, along stream segments classified as “water quality limiting,” waste treatment beyond “best practicable treatment” would be required, and costs of applying such additional treatment may be prohibitive for new development.

## SECTION 3.11

## WATER AND AIR RESOURCES POLICIES

(CONT.)

## POLICY 32

**Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.**

## EXPLANATION OF POLICY #32

Alternative systems include individual septic tanks and other subsurface disposal systems, dual systems, small systems serving clusters of households or commercial users, and pressure or vacuum sewers. These types of systems are often more cost effective in smaller, less densely populated communities and for which conventional facilities are too expensive.

## POLICY 33

**Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into inland waterways.**

## EXPLANATION OF POLICY #33

Best management practices include both structural and non-structural methods of preventing or mitigating pollution caused by the discharge of stormwater runoff and combined sewer overflows. At present, structural approaches to controlling stormwater runoff (e.g., construction of retention basins) and combined sewer overflows (e.g., replacement of combined system with separate sanitary and stormwater collection systems) are not economically feasible. Proposed amendments to the Clean Water Act, however, will authorize funding to address combined sewer overflows in areas where they create severe water quality impacts. Until funding for such projects becomes available, non-structural approaches (e.g., improved street cleaning, reduced use of road salt) will be encouraged.

The Broome-Tioga Stormwater Coalition addresses local stormwater issues for Broome County's 13 Municipal Separate Storm Sewer Systems (MS4s). These MS4 municipalities include Broome County, the City of Binghamton, the Town of Binghamton, the Town of Chenango, the Town of Conklin, the Town of Dickinson, the Village of Endicott, the Town of Fenton, the Village of Johnson City, the Town of Kirkwood, the Village of Port Dickinson, the Town of Union and the Town of Vestal. Together, the Broome-Tioga Stormwater Coalition municipalities prepare and implement a stormwater management program to comply with state and federal stormwater regulations.

## SECTION 3.11

# WATER AND AIR RESOURCES POLICIES

(CONT.)

### POLICY 34

**Discharge of waste materials into inland waterways from vessels subject to State jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.**

### EXPLANATION OF POLICY #34

All untreated sanitary waste from vessels is prohibited from being discharged into the State's inland waterways. Where inland waterway resources or activities require greater protection than afforded by this requirement the State may designate vessel waste no discharge zones. Within these no discharge zones the discharge of all vessel waste whether treated or not is prohibited. A determination from EPA that an adequate number of vessel waste pump-out stations exists is necessary before the State can designate a no discharge zone. The State prepared a Clean Vessel Act Plan which identifies the State's waters for which no discharge zones are needed and the number of vessel waste pump outs required to obtain the determination from EPA. The discharge of other wastes from vessels is limited by State law.

### POLICY 35

**Dredging and filling in inland waterways and disposal of dredged material will be undertaken in a manner that meets existing State dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.**

### EXPLANATION OF POLICY #35

Dredging, filling, and dredge material disposal are activities that are needed for waterfront revitalization and development, such as maintaining navigation channels at sufficient depths, pollutant removal, and other management needs. Such projects, however, may adversely affect water quality, fish and wildlife habitats, wetlands, and other important inland waterway resources. Often these adverse effects can be minimized through careful design and timing of the dredging or filling activities, proper siting of dredged material disposal sites, and the beneficial use of dredged material. Such projects shall only be permitted if they satisfactorily demonstrate that these anticipated adverse effects have been reduced to levels which satisfy State permit standards set forth in regulations developed pursuant to Environmental Conservation Law, (Articles 15, 24, 25, and 34), and are consistent with policies pertaining to the protection and use of inland waterway resources (LWRS policies 7, 15, 19, 20, 24, 26, and 44).

## SECTION 3.11

## WATER AND AIR RESOURCES POLICIES

(CONT.)

## POLICY 36

**Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into inland waterways; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.**

\* *Refer to Policy 8 for Definition of Hazardous Wastes*

## EXPLANATION OF POLICY #36

See Policy 8 for definition of hazardous wastes.

## POLICY 37

**Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into inland waterways.**

## EXPLANATION OF POLICY #37

Best management practices used to reduce these sources of pollution could include, but are not limited to, encouraging organic farming and pest management principles, soil erosion control practices, and surface drainage control techniques. Sediment management strategies should focus on public access sites along the designated inland waterways, addressing natural sedimentation to allow for seasonal use of these resources.

## SECTION 3.11

# WATER AND AIR RESOURCES POLICIES

(CONT.)

### POLICY 38

**The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.**

### EXPLANATION OF POLICY #38

Surface and groundwater are the principal sources of drinking water in the State, and therefore must be protected. With both groundwater and the Susquehanna River providing drinking water within the WRA, water quality in the WRA must be protected.

### POLICY 39

**The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within the waterfront revitalization area will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.**

### EXPLANATION OF POLICY #39

The definitions of terms “solid wastes” and “solid waste management facilities” are taken from the New York’s Solid Waste Management Act (Environmental Conservation Law, Article 27). Solid wastes include sludge from air or water pollution control facilities, demolition and construction debris and industrial and commercial wastes.

Examples of solid waste management facilities include resource recovery facilities, sanitary landfills and solid waste reduction facilities. Although a fundamental problem associated with the disposal and treatment of solid wastes is the contamination of water resources, other related problems may include: filling of wetlands and littoral areas, atmospheric loading, and degradation of scenic resources.

See Policy 8 for definition of hazardous wastes.

\* *Refer to Policy 8 for Definition of Hazardous Wastes*

## SECTION 3.11

**WATER AND AIR RESOURCES POLICIES**

(CONT.)

**POLICY 40**

**Effluent discharged from major steam electric generating and industrial facilities into inland waterways will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.**

**EXPLANATION OF POLICY #40**

The State Board on Electric Generation Siting and the Environment must consider a number of factors when reviewing a proposed site for facility construction. One of these factors is that the facility shall “not discharge any effluent that will be unduly injurious to the propagation and protection of fish and wildlife, the industrial development of the State, the public health, and public enjoyment of the receiving waters.” The effect of thermal discharges on water quality and aquatic organisms is considered by the siting board when evaluating any applicant’s request to construct a new steam electric generating facility.

**POLICY 41**

**Land use or development in the waterfront revitalization area will not cause national or State air quality standards to be violated.**

**EXPLANATION OF POLICY #41**

New York’s Waterfront Revitalization of Coastal Areas and Inland Waterways Program incorporates the air quality policies and programs developed for the State by the Department of Environmental Conservation pursuant to the Clean Air Act and State laws on air quality. The requirements of the Clean Air Act are the minimum air quality control requirements applicable within the waterfront revitalization area.

To the extent possible, the State Implementation Plan will be consistent with waterfront revitalization area lands and water use policies. Conversely, waterfront management guidelines and program decisions with regard to land and water use and any recommendations with regard to specific sites for major new or expanded industrial, energy, transportation, or commercial facilities will reflect an assessment of their compliance with the air quality requirements of the State Implementation Plan.

The Department of Environmental Conservation will allocate substantial resources to develop a regulatory and management program to identify and eliminate toxic discharges into the atmosphere. The State’s Waterfront Revitalization of Coastal Areas and Inland Waterways Program will assist in coordinating major toxic control programming efforts in the inland waterway regions and in supporting research on the multi-media nature of toxics and their economic and environmental effects on inland waterway resources.

## SECTION 3.11

# WATER AND AIR RESOURCES POLICIES

(CONT.)

### POLICY 42

**Waterfront revitalization program policies will be considered if the State reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.**

### EXPLANATION OF POLICY #42

The policies of the State and local coastal and inland waterway management programs concerning proposed land and water uses and the protection and preservation of special management areas will be taken into account prior to any action to change prevention of significant deterioration land classifications along inland waterways or adjacent areas. In addition, the Department of State will provide the Department of Environmental Conservation with recommendations for proposed prevention of significant deterioration land classification designations based upon the Waterfront Revitalization of Coastal Areas and Inland Waterways Program and LWRS policies.

### POLICY 43

**Land use or development in the waterfront revitalization area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.**

### EXPLANATION OF POLICY #43

The Waterfront Revitalization of Coastal Areas and Inland Waterways Program incorporates the State's policies on acid rain. As such, the Waterfront Revitalization of Coastal Areas and Inland Waterways Program will assist in the State's efforts to control acid rain. These efforts to control acid rain will enhance the continued viability of inland waterway fisheries, wildlife, agricultural, scenic and water resources.

## SECTION 3.12

# WETLANDS POLICY

### POLICY 44

**Preserve and protect freshwater wetlands and preserve the benefits derived from these areas.**

### EXPLANATION OF POLICY #44

Freshwater wetlands include marshes, swamps, bogs, and flats supporting aquatic and semiaquatic vegetation and other wetlands so defined in the NYS Freshwater Wetlands Act and the NYS Protection of Waters Act (Water Resources Law, Environmental Conservation Law Article 15). Comprising approximately 15% of the total land and water area in the WRA, wetland are present throughout the area.

The benefits derived from the preservation of freshwater wetlands include but are not limited to:

- habitat for wildlife and fish, and contribution to associated aquatic food chains
- erosion, flood and storm control
- natural pollution treatment
- groundwater protection
- recreational opportunities
- educational and scientific opportunities;
- aesthetic open space in many otherwise densely developed areas



## SECTION 4

## PROPOSED PROJECTS

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This section outlines the local vision for revitalizing Broome County's waterfront area. The goal is to undertake projects that will increase public access to the waterfront, expand recreational opportunities in the County, and support local economic growth. Specific projects aim to open up waterfront areas for public use, develop amenities and attractions along the waterfront, and spur business activity and development in Broome County's downtown area. By enhancing Broome County's waterfront and downtown, these revitalization efforts seek to benefit local residents and draw more visitors to experience all that the County has to offer.

When crafting a LWRP, each municipality is expected to develop its own set of proposed projects. Appendix A offers a detailed summary of the projects put forth for individual municipalities.

## SECTION 4.1

# WRA REVITALIZATION PROJECTS

A range of revitalization projects are proposed to enhance Broome County's waterfront revitalization area. These projects focus on expanding trails and connections, improving streetscapes and gateways, upgrading riverfront parks, integrating flood control and public access infrastructure, creating a unified wayfinding system, preserving waterfront heritage, and redeveloping industrial sites for solar energy generation.

### PUBLIC WATER ACCESS

Proposed water access projects will expand recreational opportunities for the county's residents and provide a unique tourism attraction to spur economic development. Specific projects include advancing shoreline restoration and invasive species management.

### TRAILS AND CONNECTIONS

Trails and Connections projects focus on expanding the County's trail systems and connecting them to existing transportation infrastructure, the riverfront, and downtown areas. The proposed new trails will improve public access to rivers, expand recreation, support active transportation, increase accessibility to natural resources, and promote tourism opportunities across municipalities.

### STREETSCAPE ENHANCEMENTS

Streetscape Enhancement projects focus on strengthening connections between the County's vibrant downtowns and riverfronts. Proposed improvements include: placemaking amenities that create a pedestrian-friendly environment reflecting each downtown's character; new multi-modal linkages between downtowns and riverfronts; new gateways, signs, and public amenities; and integrated green infrastructure for hazard mitigation and aesthetics.

### PARKS AND OPEN SPACE IMPROVEMENTS

Park Improvement projects aim to enhance riverfront recreation by increasing access, expanding trails and amenities, and promoting inclusive usage. As riverfront green spaces, proposed improvements also incorporate habitat restoration, flood resilience, and wayfinding signage.

### MULTI-PURPOSE INFRASTRUCTURE

Multi-purpose infrastructure projects provide enhanced public access and recreational benefits onto new or existing flood control projects across the hazard-prone area. By integrating amenities with flood control infrastructure that impedes riverfront access, these proposals mitigate flooding while also improving public waterfront connectivity.

### WAYFINDING

This proposed countywide project would create a cohesive wayfinding system to coordinate navigation across the area. Building on the Two Rivers Greenway signs, the new system would integrate various sign types to aid wayfinding for diverse transportation modes and users - from drivers to pedestrians to boaters.

### REDEVELOPMENT

Redevelopment projects focus on expanding local renewable energy generation. Proposed solar developments would repurpose underutilized industrial lands within the County's waterfront revitalization area.

### RESOURCE PRESERVATION

Resource preservation projects aim to preserve and highlight the indigenous, cultural, historic, and natural heritage that has shaped the County's evolving waterfront landscape. Ranging from National Register building rehabs to artful interpretive displays, these projects will engage visitors while unveiling the area's distinct history.

## WATERFRONT REVITALIZATION PROJECTS

	PROJECT	ESTIMATED COST	TIMEFRAME
PUBLIC WATER ACCESS	Major Water Access	Varies	5 - 10 years
	Minor Water Access	Varies	5 - 10 years
	Blueway Trail	Varies	10 - 15 years
TRAILS & CONNECTIONS	Whitney Point to Dorchester Park Trail	\$75,000 - \$250,000*	5 - 10 years
	Fenton Hiking Trail	\$75,000 - \$250,000*	5 - 10 years
	Chenango Waterfront Trail	\$75,000 - \$250,000*	10 - 15 years
	Otsiningo + Port Dickinson Park Connection	\$75,000 - \$150,000*	10 - 15 years
	Johnson City + Vestal Rail Trail Connection	\$75,000 - \$150,000*	5 - 10 years
	Chugnut Trail	\$75,000 - \$250,000*	5 - 10 years
	Vestal Rail Trail	\$75,000 - \$150,000*	10 - 15 years
	Rivercrest Canal Trail in the Town of Vestal	\$75,000 - \$150,000*	less than 5 years
	NY-PA Rail Trail	\$75,000 - \$250,000*	10 - 15 years
	Windsor Connections	\$75,000 - \$150,000*	5 - 10 years
	Colesville Rail Trail	\$75,000 - \$250,000*	10 - 15 years
PARKS & OPEN SPACE IMPROVEMENTS	Streetscape Enhancements	Varies	5 - 10 years
	Dorchester Park	\$30,000 - \$100,000*	5 - 10 years
	Chenango Bridge Park	\$30,000 - \$100,000*	5 - 10 years
	Ostiningo Park North	\$50,000 - \$100,000*	less than 5 years
	Boland Park	\$20,000 - \$50,000*	5 - 10 years
	Argonne Avenue Park	\$25,000 - \$50,000*	5 - 10 years

\*These costs are estimates for planning and design documents only, and they can vary significantly based on the project's scope. The provided estimates do not include construction costs.

## WATERFRONT REVITALIZATION PROJECTS

	PROJECT	ESTIMATED COST	TIMEFRAME
PARKS & OPEN SPACE IMPROVEMENTS	Riverview Park	\$40,000 - \$90,000*	5 - 10 years
	Mersereau Park	\$20,000 - \$50,000*	5 - 10 years
	Grippen County Park	\$60,000 - \$120,000*	5 - 10 years
	Castle Gardens Park	\$30,000 - \$80,000*	5 - 10 years
	Schnurbusch Park	\$30,000 - \$50,000*	5 - 10 years
	Valley Park	\$30,000 - \$100,000*	5 - 10 years
MULTI-PURPOSE INFRASTRUCTURE	Veterans River Park	\$30,000 - \$80,000*	3 - 5 years
	Fireman's Field Park	\$50,000 - \$120,000*	5 - 10 years
	Levee Trails	Mersereau Park: \$500,000 Nanticoke: \$1,400,000 Tioughnioga: \$2,500,000	3 - 5 years
	Castle Creek Crossing + Flood Mitigation	Pedestrian Bridge: \$1,500,000 Dredging + Realignment: \$2 million	10 - 15 years
	Flood Mitigation in Broad Acres	\$1,500,000	10 - 15 years
	Wayfinding	Varies	5 - 10 years
	Redevelopment	--	5 - 10 years
RESOURCE PRESERVATION	Lock 107 Restoration	--	5 - 10 years
	Interpretive Displays	--	less than 5 years
	Ouaquaga Bridge Interpretation	--	5 - 10 years

\*These costs are estimates for planning and design documents only, and they can vary significantly based on the project's scope. The provided estimates do not include construction costs.

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# PROPOSED PROJECTS: **PUBLIC WATER ACCESS**

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## OVERVIEW

Improving public access to Broome County's scenic and diverse waterways is an overarching goal of this LWRS. This section identifies several projects focused on improving existing or creating new public water access along each of the designated inland waterways in the county. Together, these proposed projects (see map on next page) will create a robust, accessible water-based recreational network that:

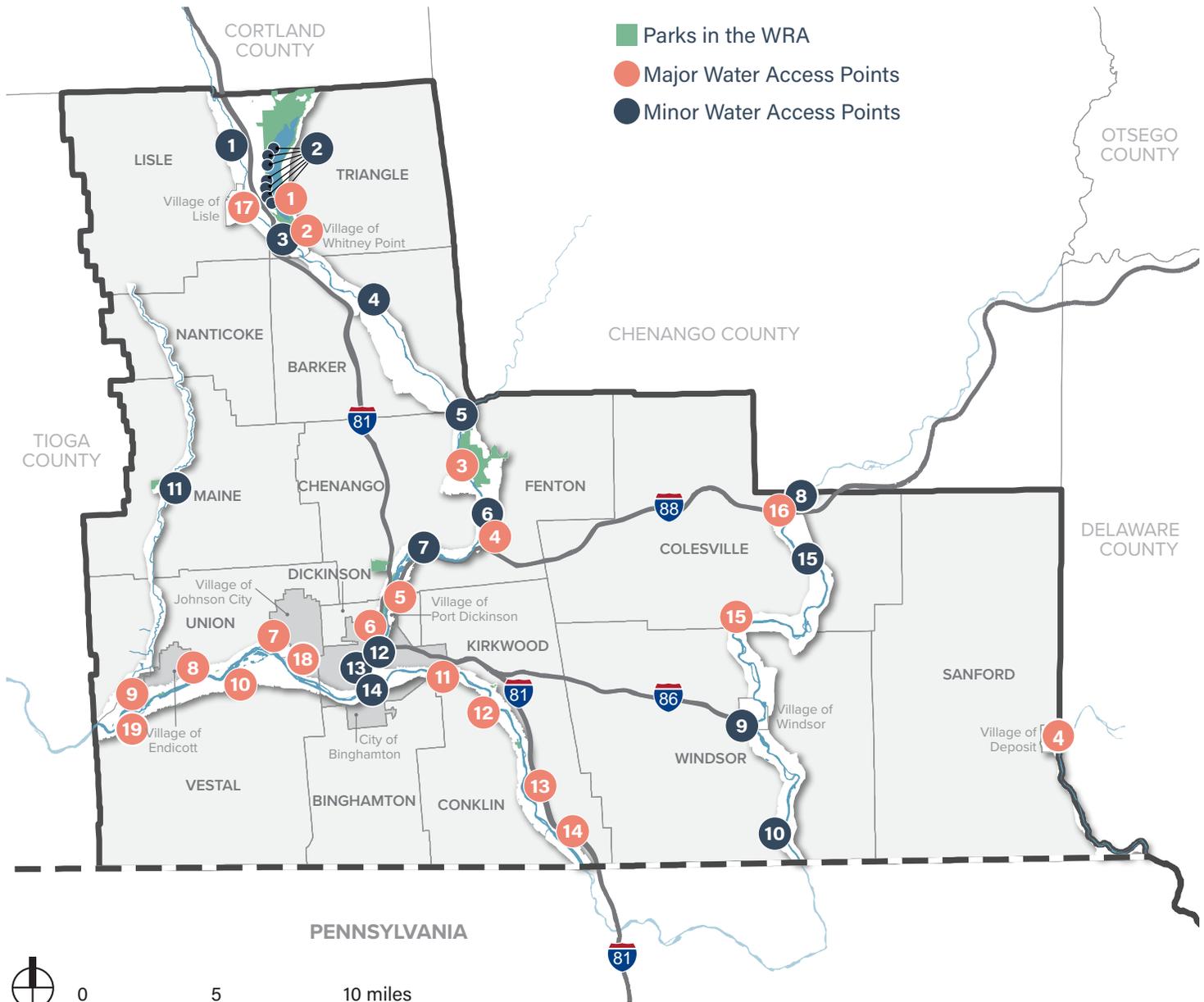
- Expands recreational opportunities for the county's residents;
- Provides a unique tourism attraction and spurs economic development; and,
- Advances shoreline restoration and invasive species management.

## PROPOSED PROJECTS

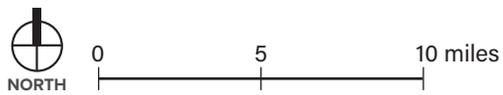
Three projects are identified in this section, including:

- A county-wide network of publicly-accessible **Major Water Access** points
- A county-wide network of publicly-accessible **Minor Water Access** points; and,
- The creation of a county-wide recreational boating network, the **Blueway Plan**

PROPOSED PROJECT LOCATIONS: PUBLIC WATER ACCESS



- Parks in the WRA
- Major Water Access Points
- Minor Water Access Points



- |  |                                |                                 |                                  |
|--|--------------------------------|---------------------------------|----------------------------------|
| <b>1</b> Dorchester Park               | <b>11</b> Sandy Beach Park     | <b>1</b> Lighthouse Landing     | <b>11</b> Park Street*           |
| <b>2</b> Route 206 Bridge              | <b>12</b> Sullivan Park        | <b>2</b> Keibel Road            | <b>12</b> Binghamton Plaza*      |
| <b>3</b> Chenango Valley State Park    | <b>13</b> Veterans River Park  | <b>3</b> Route 79 Bridge        | <b>13</b> Roberson Museum*       |
| <b>4</b> Port Crane                    | <b>14</b> Riverside Lane       | <b>4</b> Itaska                 | <b>14</b> Confluence Park*       |
| <b>5</b> Port Dickinson Community Park | <b>15</b> Ouaquaga Bridge      | <b>5</b> Chenango Forks         | <b>15</b> Centerville Loop Road* |
| <b>6</b> Otsiningo County Park         | <b>16</b> Nineveh Bridge       | <b>6</b> Beer Tree              |                                  |
| <b>7</b> William Hill Park             | <b>17</b> Jennings Creek Road* | <b>7</b> Chenango Bridge        |                                  |
| <b>8</b> Riverview Park                | <b>18</b> Boland Park*         | <b>8</b> Enchanted Gardens      |                                  |
| <b>9</b> Grippen Park                  | <b>19</b> Castle Gardens Park* | <b>9</b> South Windsor          |                                  |
| <b>10</b> Harold Moore Park            | <b>20</b> Fireman's Field*     | <b>10</b> Pine Crest Campground |                                  |

\*Denotes new proposed water access points; all other locations are existing water access points where improvements are proposed

## SECTION 4.2 | PROPOSED PROJECTS

# PUBLIC WATER ACCESS



## MAJOR WATER ACCESS

### Location:

Countywide

### Jurisdiction:

Varies

### Applicable LWRS Policies:

#### Development

Policies 1, 2, and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding and Erosion Hazards

Policy 11, 12, 12a, 13, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21 and 21a

#### Historic & Scenic Resources

Policies 23 and 25

### Estimated Cost:

Final design costs will vary by

location: \$20,000-\$80,000

### Timeframe:

Mid-Term: 5-10 years

### Funding:

#### New York State

Environmental Protection Funds

Local Waterfront Revitalization Plan

(LWRS)

### PROJECT DESCRIPTION

Major Water Access projects focus on expanding existing and creating new public water access points in the study area to improve accessibility and experience for all users, expand recreational offerings, and support a county-wide recreational boating network. Major water access points often coincide with existing waterfront parks and are important components of the Blueway Trail (see page 206 and Appendix E for detailed descriptions of each major water access point). The following improvements are recommended at each major water access location:

- Cohesive water-based recreation signage system, including regulatory signage, identification signage and mile markers;
- Shoreline restoration and stabilization to include flood mitigation and invasive species management;
- Boat launch area with boat storage, vehicular and bike parking and where feasible, car- and hand-launch accommodations;
- Bike and boat rentals; and
- Pedestrian amenities, such as seating, picnic tables, and plazas/park areas.

### BENEFITS

This proposed project is expected to provide the following benefits:

- Enhanced public access to the waterfront
- Expanded recreational amenities and facilities
- Improved user safety
- Enhanced tourism opportunities
- Enhanced connectivity between waterfront resources

### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Approvals from individual municipalities in Broome County
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



REPRESENTATIVE IMAGERY



EXISTING CONDITION  
Port Dickinson Community Park Boat Launch



Proposed Major Water Access (typical conditions)

## SECTION 4.2 | PROPOSED PROJECTS

# PUBLIC WATER ACCESS



## MINOR WATER ACCESS

### Location:

Countywide

### Jurisdiction:

Varies

### Applicable LWRS Policies:

#### Development

Policies 1, 2, and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding and Erosion Hazards

Policy 11, 12, 12a, 13, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21 and 21a

#### Historic & Scenic Resources

Policies 23 and 25

### Estimated Cost:

Final design cost will vary by location:

\$20,000-\$80,000

### Timeframe:

Mid-Term: 5-10 years

### Funding:

New York State

Environmental Protection Fund

### PROJECT DESCRIPTION

Minor Water Access projects include upgrades to existing public water access points in the study area as well as the creation of new water access points. These projects focus on improving accessibility for all users and are important components of the Blueway Trail (see page 206 and Appendix E for detailed descriptions of each minor water access point). The following improvements are recommended at each minor water access location:

- Cohesive water-based recreation signage system, including regulatory signage, identification signage and mile markers;
- Shoreline restoration and stabilization to include flood mitigation and invasive species management;
- Boat launch area with hand-launch accommodations; and
- Pedestrian amenities to include seating and picnic tables.

### BENEFITS

This proposed project is expected to provide the following benefits:

- Enhanced public access to the waterfront
- Expanded recreational amenities and facilities
- Improved user safety
- Enhanced tourism opportunities
- Enhanced connectivity between waterfront resources

### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Approvals from individual municipalities in Broome County
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



REPRESENTATIVE IMAGERY



EXISTING CONDITION  
South Windsor Boat Launch



Proposed Minor Access (typical conditions)

## SECTION 4.2 | PROPOSED PROJECTS

# PUBLIC WATER ACCESS

### BLUEWAY TRAIL

**Location:**

Countywide

**Jurisdiction:**

Varies

**Applicable LWRS Policies:****Development**

Policies 1, 2, and 4

**Fish and Wildlife**

Policies 8a and 9

**Flooding and Erosion Hazards**

Policy 11, 12, 12a, 13, and 17

**Public Access**

Policies 19, 19a, and 20

**Recreation**

Policies 21 and 21a

**Historic & Scenic Resources**

Policies 23 and 25

**Timeframe:**

Long-Term: 10-15 years

**Funding:****New York State**

Environmental Protection Fund

**Federal**

Infrastructure Investment and Jobs Act

**PROJECT DESCRIPTION**

As a supplemental piece to the LWRS, a Blueway Plan was developed to establish an enhanced network of public water trails along Broome County's waterways. This comprehensive plan assesses existing conditions related to water access, identifies opportunities for trail enhancements and new access sites, and provides guidance on wayfinding, economic tie-ins, and integrating with other recreation resources. It lays out strategic recommendations followed by an implementation framework to incrementally improve blueway trails to bolster public recreation, alternative transportation, watershed stewardship, and sustainable economic development along Broome County's waterways.

The plan includes an analysis of current conditions related to water resources, access points, hazards, services, signage and identifies opportunities and challenges. Based on this foundation, recommendations are made for major and minor enhancements to existing access points, potential new access sites, wayfinding signage, economic development tie-ins, and updating the Broome County River Guide. Finally, the plan identifies an implementation framework and strategies that can be implemented over time.

**BENEFITS**

This proposed project is expected to provide the following benefits:

- Enhanced public access to the waterfront
- Expanded recreational amenities and facilities
- Improved user safety
- Enhanced tourism opportunities
- Enhanced connectivity between waterfront resources

**REGULATORY REQUIREMENTS**

The following will be required for project implementation:

- Approvals from individual municipalities in Broome County
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)

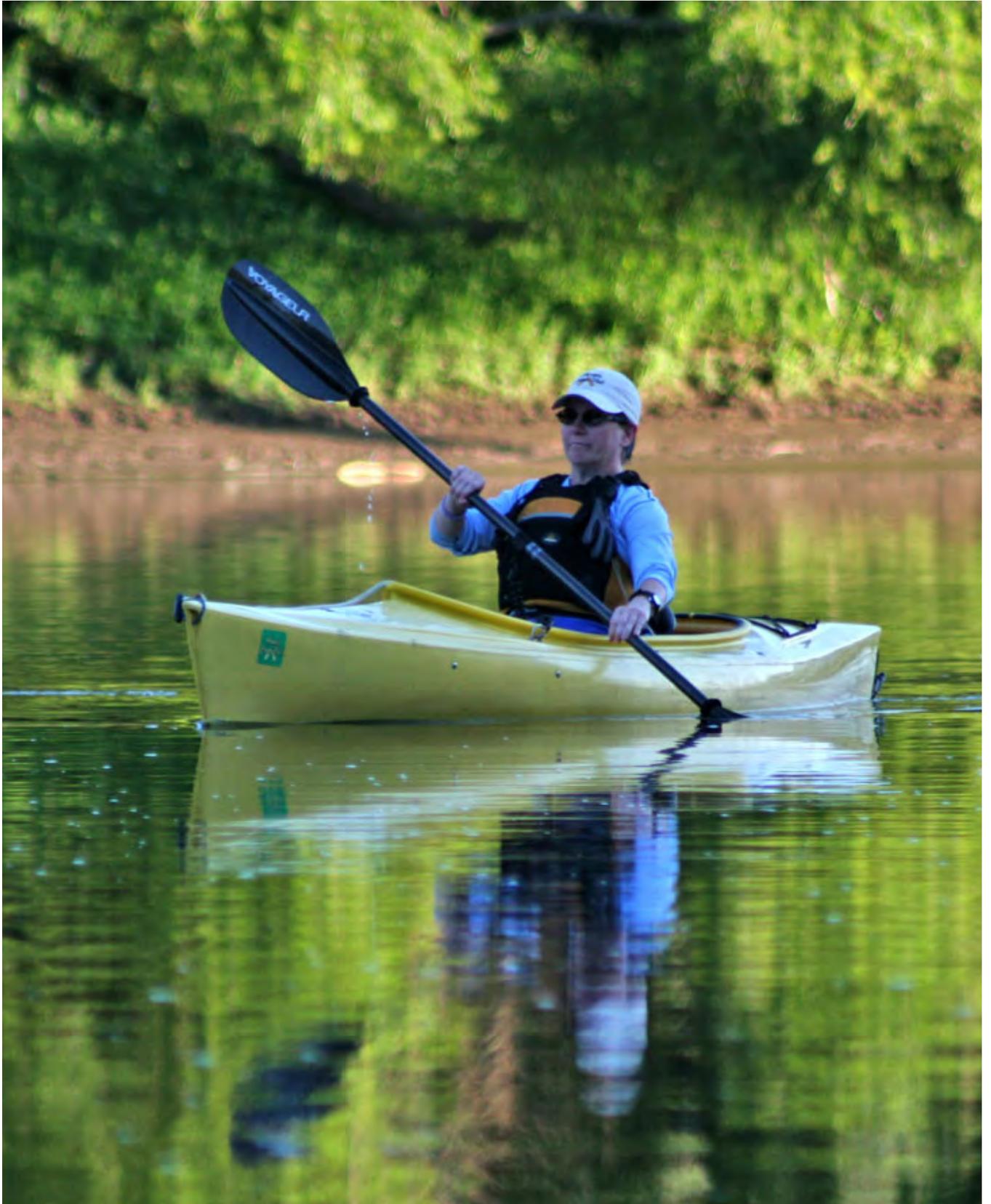


Photo Credit: Go All Out Broome County



# PROPOSED PROJECTS: **TRAILS + CONNECTIONS**

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## OVERVIEW

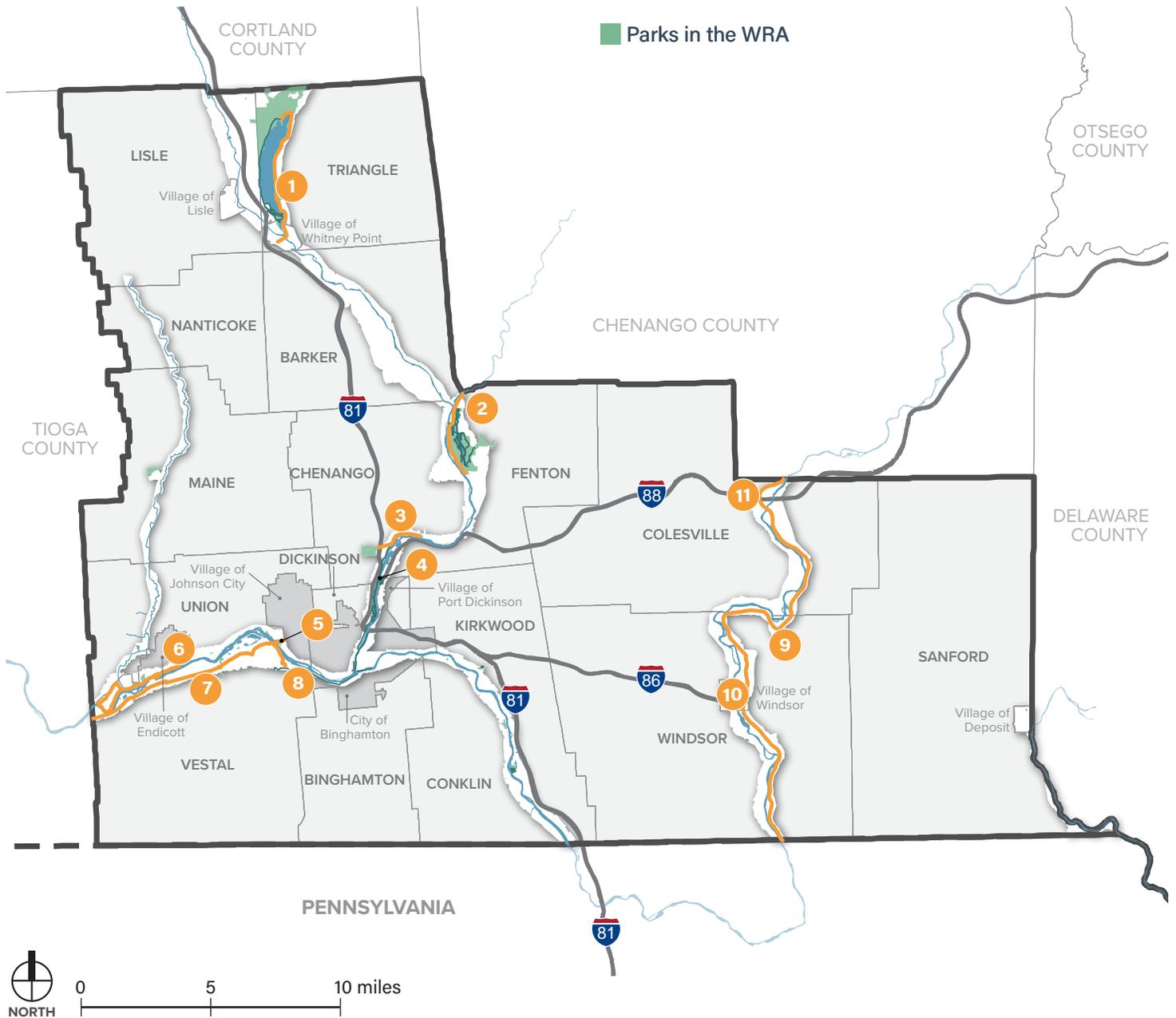
Trails + Connections projects focus on expanding and connecting the County's trail systems to existing multimodal infrastructure, the riverfront, and downtowns (see map on the next page for proposed trail locations). Together, the proposed trails will enhance public access to the county's rivers, expand recreational opportunities, support active transportation locally and regionally, increase accessibility to the county's diverse natural resources, and enhance tourism opportunities for local municipalities.

## PROPOSED PROJECTS

Eleven projects are proposed in this section, including:

- **Whitney Point to Dorchester Park Trail** in the Village of Whitney Point and Town of Triangle
- **Fenton Hiking Trail** in the Town of Fenton
- **Chenango Waterfront Trail** in the Town of Chenango
- **Otsiningo + Port Dickinson Park Connection** in Town of Port Dickinson
- **Johnson City and Vestal Rail Trail Connection** in the Village of Johnson City
- **Chugnut Trail** in the Town of Union
- **Vestal Rail Trail** in the Town of Vestal
- **Rivercrest Canal Trail** in the Town of Vestal
- **NY-PA Rail Trail** in the Towns of Colesville and Windsor
- **Downtown Windsor Connections** in the Village of Windsor
- **Colesville Rail Trail** in the Town of Colesville

# TRAILS AND CONNECTIONS



- 1 Whitney Point to Dorchester Park Trail
- 2 Fenton Hiking Trail
- 3 Chenango Waterfront Trail
- 4 Otsiningo and Port Dickinson Community Park Connection
- 5 Johnson City and Vestal Rail Trail Connection
- 6 Chugnut Trail

- 7 Vestal Rail Trail
- 8 Rivercrest Canal Trail in the Town of Vestal
- 9 NY-PA Rail Trail
- 10 Windsor Connections
- 11 Colesville Rail Trail

## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## WHITNEY POINT TO DORCHESTER PARK TRAIL

### Location:

Village of Whitney Point and Town of Triangle

### Jurisdiction:

Federal, County, and Local

### Approximate Trail Length:

~2.0 mi.

### Applicable LWRS Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding & Erosion Hazards

Policies 12, 12a, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

#### Historic & Scenic Resources

Policy 25

### Estimated Cost:

Final design cost will vary by project

scope: \$75,000-\$250,000

### Timeframe:

Mid-Term: 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This project includes a new multi-use trail to connect the Village of Whitney Point and Dorchester County Park. This proposed trail would also connect to a new rustic hiking trail, which is currently under implementation, and once complete, will loop around the entire Whitney Point Lake. As part of this project, the following improvements are recommended:

- The creation of a new multi-use trail for cyclists and pedestrians. The trail would begin at the intersection of U.S. 11 and State Route 206, proceed across the Route 206 bridge, continue north along N. Hickory Street and then Prospect Street. North of the dam, the trail would continue on federal property along the shoreline and into Dorchester Park.
- The creation of a new trailhead in the Village of Whitney Point at the Route 206 bridge boat launch (a proposed major water access point). This trailhead would not only serve trail uses, but would also better connect the Tioughnioga riverfront to the Village of Whitney Point.
- A new trailhead in Dorchester County Park (a proposed major water access point);
- Trail signage and scenic lookouts along the trail; and
- Invasive species management and shoreline restoration, as needed.

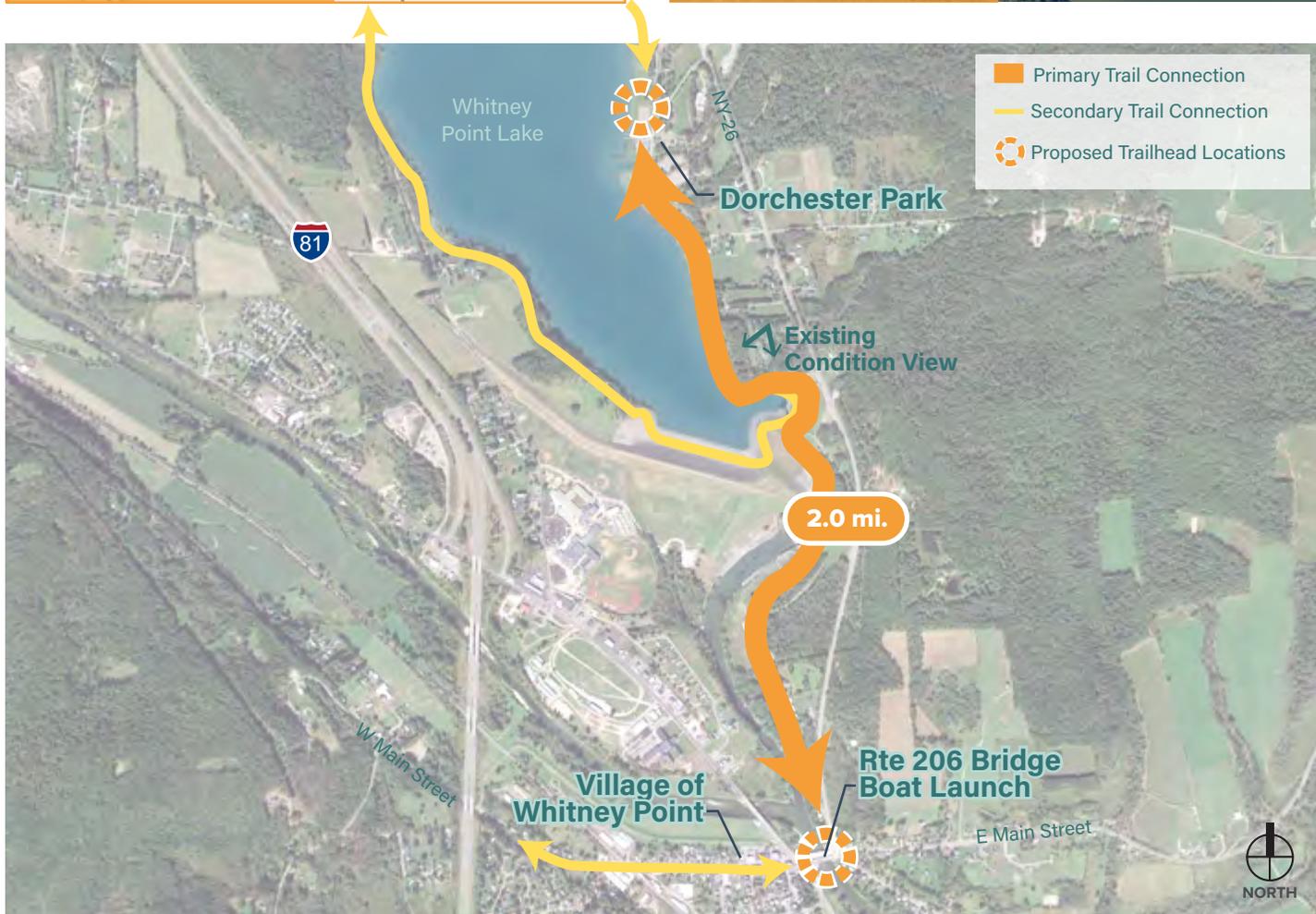
### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- Expanded active transportation network;
- Enhanced public access to the waterfront;
- Increased recreational amenities;
- Improved access to natural resources; and
- Enhanced tourism opportunities.

### REGULATORY REQUIREMENTS

The proposed project traverses multiple jurisdictions and will require permits from local municipalities (Village of Whitney Point and Town of Triangle), New York State, and the federal government.



Existing Condition Photo Credit: EagleView

## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## FENTON HIKING TRAIL

### Location:

Town of Fenton

### Jurisdiction:

State and Local

### Trail Length:

~2.5 mi.

### Applicable LWRS Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding & Erosion Hazards

Policies 12, 12a, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

#### Historic & Scenic Resources

Policies 23 and 25

### Estimated Cost:

Final design cost will vary by project scope: \$75,000-\$250,000

### Timeframe:

Mid-Term: 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This new proposed hiking and biking trail would generally follow the former Chenango Canal towpath, connecting to the State bike route, historic Lock 107, Chenango Valley State Park, and the Chenango River waterfront. The following improvements are recommended:

- A new, accessible natural surface trail from the Route 79 bridge south to Chenango Valley State Park following the former Chenango Canal towpath;
- An upgraded River Road Towpath trail within Chenango Valley State Park to improve accessibility and accommodate multiple types of users;
- A new trailhead in Chenango Valley State Park in conjunction with the proposed major water access point at this location;
- Interpretive signage and trail user amenities along the Chenango Canal Prism at historic Lock 107
- Trail signage; and
- Native landscaping and invasive species management.

### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- Expanded active transportation network;
- Enhanced public access to the waterfront;
- Increased recreational amenities;
- Improved access to natural and cultural resources; and
- Enhanced tourism opportunities.

### REGULATORY REQUIREMENTS

In addition to close coordination with New York State Office of Parks, Recreation, and Historic Preservation, the following will be required for project implementation:

- Approvals from the Town of Fenton
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- State Historic Preservation Office (SHPO)
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



LOCATION MAP



EXISTING CONDITION



REPRESENTATIVE IMAGERY



REPRESENTATIVE IMAGERY

Existing Condition Photo Credit: EagleView



## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## CHENANGO WATERFRONT TRAIL

### Location:

Town of Chenango

### Jurisdiction:

State and Local

### Trail Length:

~1.5 mi.

### Applicable LWRs Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding & Erosion Hazards

Policies 12, 12a, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

### Estimated Cost:

Final design cost will vary by project scope: \$75,000-\$250,000

### Timeframe:

Long-Term: 10-15 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This new proposed riverfront trail would connect the Otsiningo Park trail system north to Chenango Bridge Park, with connections to Wolfe Park, Front Street, the DEC boat launch at the Chenango Park N' Ride (a proposed minor water access point), and Chenango Valley Middle/High School. The following improvements are recommended:

- A new, off-road multi-use riverfront trail connecting Otsiningo Park North to Chenango Bridge Park. The development of this trail should be part of the redevelopment of the vacant Northgate Plaza.
- New trailheads at Chenango Bridge Park, Otsiningo Park North, Wolfe Park, Front Street, and the Chenango Park N' Ride / DEC boat launch;
- Trail signage and mileage markers;
- Scenic lookouts and user amenities along the trail (e.g., benches, bike fix-it stations, water stations);
- Shoreline restoration and invasive species management; and
- Enhanced multi-modal facilities to connect the proposed riverfront trail to Wolfe Park, Front Street, and Chenango Valley Middle/High School.

### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- Expanded active transportation network;
- Enhanced public access to the waterfront;
- Increased recreational amenities;
- Improved access to natural resources; and
- Enhanced tourism opportunities.

### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Approvals from the Town of Chenango
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## OTSININGO + PORT DICKINSON PARK CONNECTION

### Location:

Village of Port Dickinson and Town of Chenango

### Jurisdiction:

Federal, State, County, and Local

### Trail Length:

~1 mi.

### Applicable LWRS Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding & Erosion Hazards

Policies 11, 12, 12a, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

### Estimated Cost:

Final design cost will vary by project

scope: \$75,000-\$150,000

### Timeframe:

Long-Term: 10-15 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This project would create a new pedestrian bridge over the Susquehanna River to connect Otsiningo Park and Port Dickinson Community Park. This proposed project originated from the Binghamton Metropolitan Greenway Study (1999), which recommended a study to examine the feasibility of suspending a pedestrian bridge off of the I-88 bridge. Proposed project elements include:

- The creation of a new pedestrian bridge over the Chenango River. It is proposed that a six spanned bridge, beginning at the Otsiningo Park trail, would follow under the I-88 bridge by spanning across the tops of the piers in and along the river. The bridge would cross over the trail on the Port Dickinson side and curve around to connect to the existing park trail;
- New trailheads in Port Dickinson Community Park and Otsiningo Park; and,
- Trail signage and lighting along the bridge.

### BENEFITS

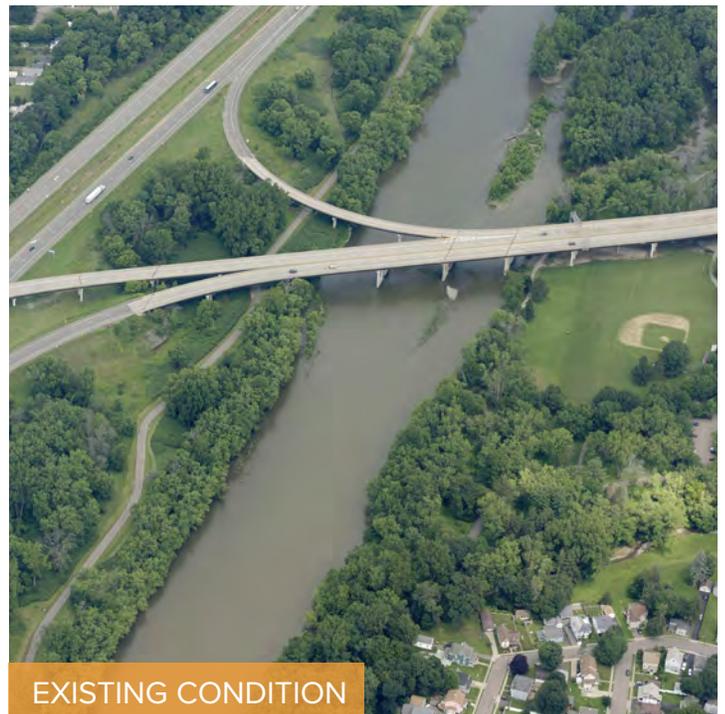
The proposed project would provide the following benefits for the Broome County WRA:

- A much needed east-west connection across the river for pedestrians and cyclists;
- Enhanced public access to the riverfront;
- New regional multi-modal and park connections; and,
- Expanded recreational amenities.

### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Permits from the Coast Guard and the U.S. Army Corps of Engineers as the Susquehanna River is a navigable waterway
- Permits from the Federal Highway Authority and NYS DOT to use the I-88 bridge structure
- Approvals from the Town and Village of Port Dickinson
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



Existing Condition Photo Credit: EagleView  
 Representative Imagery Photo Credit: Informed Infrastructure

## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## JOHNSON CITY & VESTAL RAIL TRAIL CONNECTION

### Location:

Village of Johnson City  
Town of Vestal

### Jurisdiction:

Local

### Trail Length:

~.25 mi.

### Applicable LWRs Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding & Erosion Hazards

Policies 12, 12a, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

### Estimated Cost:

Final design cost will vary by project  
scope: \$75,000-\$150,000

### Timeframe:

Mid-Term: 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This proposed project links the Johnson City Rail Trail and Vestal Rail Trail across the Susquehanna River via a decommissioned rail bridge, just north of Boland Park in the Village of Johnson City. Proposed project elements include:

- Extension of the Johnson City Rail Trail (currently under development) to the Susquehanna River;
- Rehabilitation of an existing, decommissioned rail bridge to accommodate a multi-use path connecting the Johnson City and Vestal Rail Trails over the Susquehanna River;
- A new trailhead at Boland Park, providing a gateway to the Johnson City and Vestal Rail Trails; and
- Trail signage and lighting along the bridge.

### BENEFITS

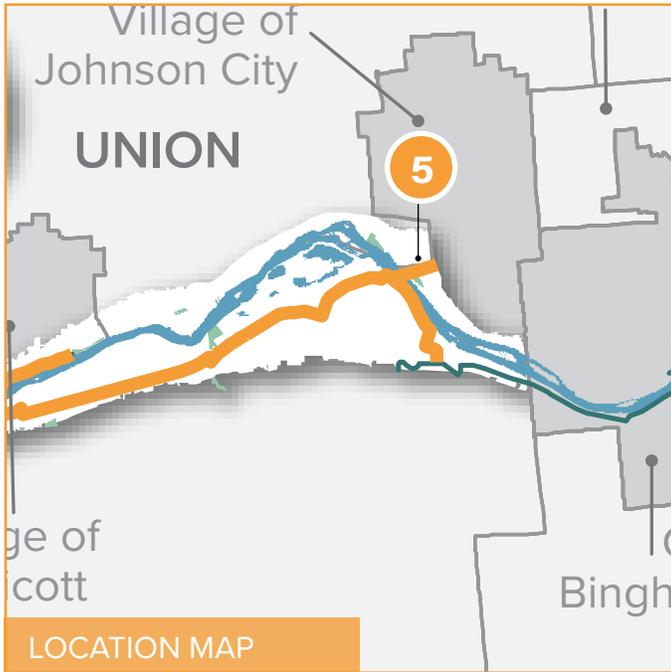
The proposed project would provide the following benefits for the Broome County WRA:

- Improved connectivity across the river and between municipalities for pedestrians and cyclists;
- Enhanced public access to the riverfront;
- Increased recreational amenities;
- Improved access to natural resources; and
- Enhanced tourism opportunities.

### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Permits from the Coast Guard and the U.S. Army Corps of Engineers as the Susquehanna River is a navigable waterway
- Approvals from the Village of Endicott and Town of Union
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



Existing Condition Photo Credit: EagleView

## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## CHUGNUT TRAIL

### Location:

Village of Endicott

Town of Union

### Jurisdiction:

County, Local

### Trail Length:

~4.0 mi.

### Applicable LWRs Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding & Erosion Hazards

Policies 12, 12a, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

### Estimated Cost:

Final design cost will vary by project

scope: \$75,000-\$250,000

### Timeframe:

Mid-Term: 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This project builds on existing plans to improve and expand the Chugnut Trail along the Susquehanna waterfront, from Riverview Park in the Village of Endicott west to Glendale Park in the Town of Union. Proposed project elements include:

- Upgrades to the existing Chugnut Trail, including surfacing improvements, placemaking amenities, and lighting;
- The creation of a new continuous multi-use, riverfront trail from the existing Chugnut Trail's western terminus (near Vestal Avenue) west to Glendale Park;
- A new walking/biking loop around the Endicott Wastewater Treatment Plant and Tri-Cities Airport, a pedestrian bridge over Nanticoke Creek;
- New neighborhood connections including trailheads and multi-modal trails and facilities to improve connectivity between the proposed Chugnut Trail and Mersereau Park, Round Top Park, Grippen Park, En Joie Golf Club, and Main Street;
- Scenic lookouts and user amenities along the trail (e.g., benches, bike fix-it stations, water stations);
- Trail signage and mileage markers; and,
- Native landscaping, shoreline restoration, and invasive species management along the length of the trail.

### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- New regional multi-modal and park connections
- Expanded recreational amenities and enhanced public access to the riverfront
- Increased tourism opportunities

### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Approvals from the Village of Endicott, Town of Union, and Broome County
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



Existing Condition Photo Credit: EagleView

## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## VESTAL RAIL TRAIL

### Location:

Town of Vestal

### Jurisdiction:

Local

### Trail Length:

~2.25 mi.

### Applicable LWRP Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding & Erosion Hazards

Policies 12, 12a, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

#### Historic & Scenic Resources

Policies 23 and 25

### Estimated Cost:

Final design cost will vary by project scope: \$75,000-\$150,000

### Timeframe:

Long-Term: 10-15 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This proposed project includes upgrades to the existing Vestal Rail Trail and implementation of the recommendations contained in the Vestal Road Trail Feasibility Study, which was completed in 2021 and assessed the feasibility of extending the existing Vestal Rail Trail along Vestal Road in the Town of Vestal. In particular, this proposed project emphasizes connections between the existing and future Vestal Rail / Road Trail and the Susquehanna riverfront. Proposed project elements include:

- Implementation of the Vestal Road Trail Feasibility Study recommendations;
- Upgrades to the existing Vestal Rail Trail, including surfacing and placemaking improvements (e.g., interpretive displays, art, trail user amenities);
- New trailheads and multi-modal facilities to connect the Vestal Rail Trail to riverfront destinations and other municipalities, such as Harold Moore Park, the proposed Gates Road boat launch (proposed minor water access point) and Johnson City;
- Scenic lookouts and user amenities along the trail (e.g., benches, bike fix-it stations, water stations);
- Trail signage and mileage markers; and,
- Native landscaping, shoreline restoration, and invasive species management along the length of the trail.

### BENEFITS

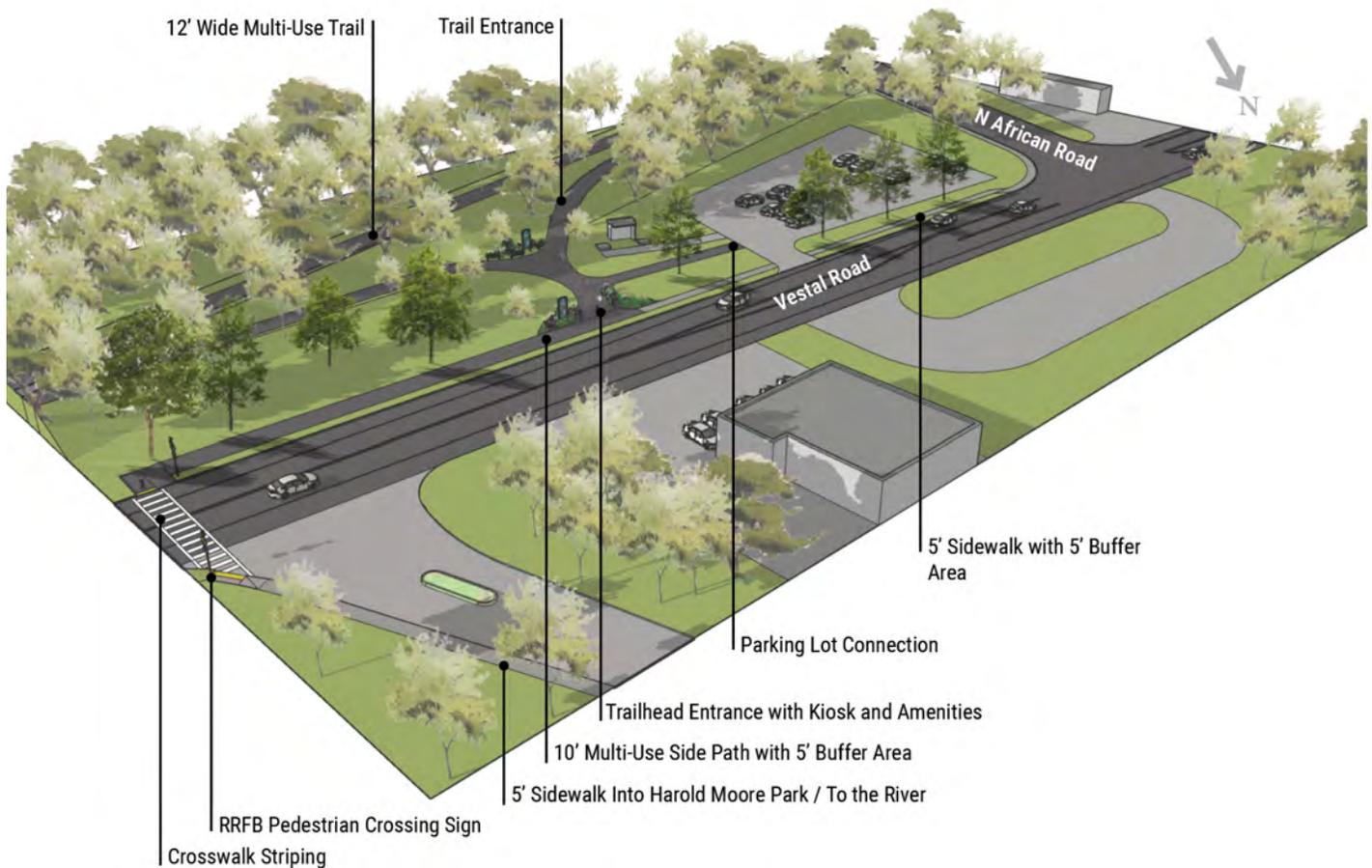
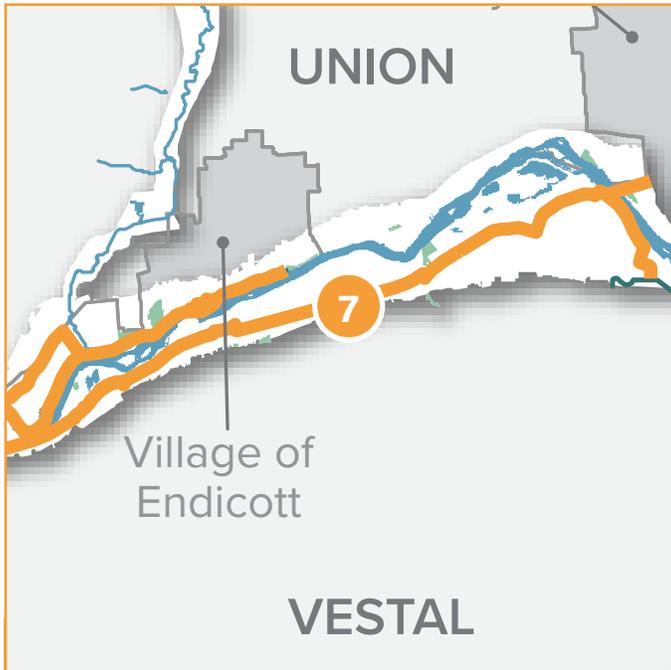
The proposed project would provide the following benefits for the Broome County WRA:

- New regional multi-modal and park connections
- Expanded recreational amenities and enhanced public access to the riverfront
- Increased tourism opportunities

### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Approvals from the Town of Vestal
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



Proposed Extension of Existing Vestal Rail Trail and Connection to Harold Moore Park

## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## RIVERCREST CANAL TRAIL IN THE TOWN OF VESTAL

### Location:

Town of Vestal

### Jurisdiction:

Local

### Trail Length:

~.5 mi.

### Applicable LWRs Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding & Erosion Hazards

Policies 12, 12a, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

#### Historic & Scenic Resources

Policies 25

### Estimated Cost:

Final design cost will vary by project scope: \$75,000-\$150,000

### Timeframe:

Short-Term: Less than 5 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This proposed project is located on an approximately 16-acre parcel situated between the Susquehanna River and Vestal Parkway and features 2,000 linear feet of riverfront. This parcel was recently donated to the Town of Vestal as a conservation easement and will be preserved in perpetuity. The proposed project elements include:

- Creation of a new, publicly accessible nature preserve along the Susquehanna River;
- A new trail system, following the historic canal towpath, connecting Vestal Parkway to the Susquehanna River and creating new recreational opportunities ;
- A new permeable parking area with bioretention areas and multi-modal facilities (e.g., bike racks);
- New bridges over the canal paired with interpretive and educational displays;
- New park and trail signage;
- New viewing platforms along the river;
- Ecological restoration and invasive species management throughout the preserve; and
- Connection to the 434 Greenway.

### BENEFITS

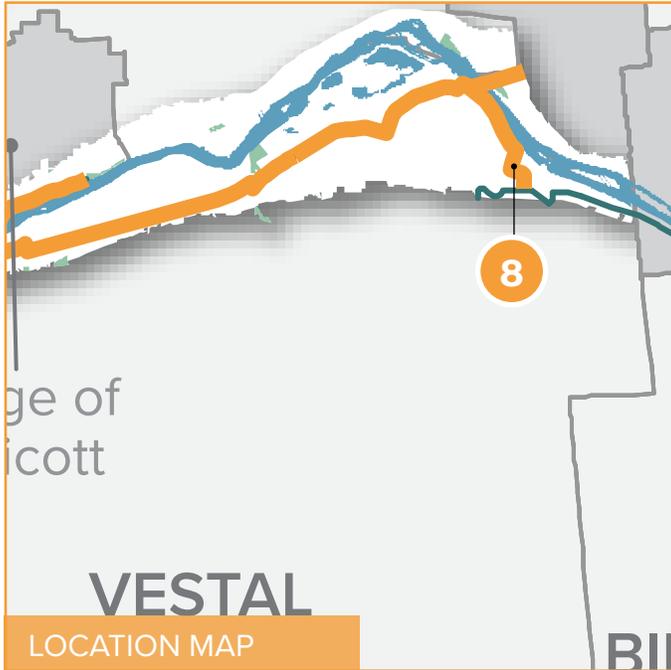
The proposed project would provide the following benefits for the Broome County WRA:

- Expanded recreational amenities and enhanced public access to the riverfront;
- Restoration and conservation of riverfront landscapes; and
- Increased tourism opportunities.

### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Approvals from the Town of Vestal
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



Existing Condition Photo Credit: EagleView

## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## NY-PA RAIL TRAIL

### Location:

Town of Colesville

Town of Windsor

### Jurisdiction:

Varies

### Trail Length:

Trail Length and Location Varies

### Applicable LWRs Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flooding & Erosion Hazards

Policies 12, 12a 13, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

#### Historic & Scenic Resources

Policies 23 and 25

### Estimated Cost:

Final design cost will vary by project

scope: \$75,000-\$250,000

### Timeframe:

Long-Term: 10-15 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This proposed project utilizes an abandoned rail corridor to create an off-road, multi-modal trail connection along the Susquehanna River, from the Pennsylvania state line north to the Chenango County line. This project has been of interest to various stakeholders since the mid-1990s and if acquired, this project would enable Broome County to connect into Pennsylvania's well-developed rail trail network, significantly expanding regional mobility and recreational options. Project elements include:

- The development of a new trail along the length of the abandoned rail corridor, including drainage improvements and new surfacing improve accessibility for all users;
- The creation of new trailheads and access points along the length of the trail in the WRA;
- The creation of a new gateway to the proposed trail at the former rail station and now museum, located in the Town of Windsor;
- Scenic overlooks along the Susquehanna River;
- Wayfinding and interpretive signage; and,
- Amenities for trail users (e.g., seating, bike fix-it stations).

### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- Expanded regional and local multi-modal connections;
- Improved outdoor recreational opportunities;
- Enhanced public access to the riverfront; and,
- Increased tourism opportunities.

### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Approvals from local municipalities
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



Existing Condition Photo Credit: Bergmann

## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## WINDSOR CONNECTIONS

### Location:

Village of Windsor

### Jurisdiction:

Local, County, State

### Trail Length:

Trail Length and Location Varies

### Applicable LWRs Policies:

#### Development

Policies 1 and 4

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

### Timeframe:

Mid-Term: 5-10 years

### Estimated Cost:

Final design cost will vary by project scope: \$75,000-\$150,000

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This project proposes new multi-modal facilities along Main Street (NY State Route 79) and Chapel Street (Broome County Route 28) to better connect the Village of Windsor to the South Windsor boat launch (proposed minor water access point), the Railroad Museum, and the proposed NY-PA rail trail. Proposed project elements include:

- Upgraded pedestrian facilities and crossing infrastructure;
- New bicycle facilities and crossing infrastructure; and,
- Wayfinding signage.

### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- Expanded regional and local multi-modal connections;
- Improved outdoor recreational opportunities;
- Enhanced public access to the riverfront; and,
- Increased tourism opportunities.

### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Approvals from local municipalities
- NYS DOT Highway Work Permit
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



Existing Condition Photo Credit: GoogleEarth

## SECTION 4.2 | PROPOSED PROJECTS

# TRAILS AND CONNECTIONS



## COLESVILLE RAIL TRAIL

### Location:

Town of Colesville

### Jurisdiction:

### Trail Length:

Trail Length and Location Varies

### Applicable LWRS Policies:

#### Development

Policies 1 and 4

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 22

### Estimated Cost:

Final design cost will vary by project scope: \$75,000-\$250,000

### Timeframe:

Long-Term: 10-15 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This proposed project includes the creation of a new trail, using an inactive rail line, along the eastern side of the Upper Susquehanna River and would connect this former transportation corridor to the proposed NY-PA rail trail and link additional regional connections including the Finger Lakes Hiking Trail. The proposed project elements include:

- The redevelopment of the existing rail bed into a recreational trail for pedestrian use;
- Improved connectivity between the proposed trail and local destinations (e.g., Main Street in the Town of Colesville);
- Improved public riverfront access;
- Scenic overlooks along the Susquehanna River;
- Wayfinding and interpretive signage; and,
- Amenities for trail users (e.g., seating, bike fix-it stations).

### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- Improved pedestrian and cyclist access and connectivity along the Susquehanna River corridor;
- New connections to a larger trail network (NY-PA Rail Trail) that is a destination within the region;
- Increased opportunities for scenic viewing along the former railway;
- Enhanced outdoor active and passive recreation that supports healthy communities; and,
- Increased tourism opportunities.

### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Approvals from local municipalities
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYS DEC, OGS, DOS, and USACoE)



To Village of Windsor



# PROPOSED PROJECTS: STREETSCAPE ENHANCEMENTS

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## OVERVIEW

Streetscape Enhancement projects focus on strengthening the connections between the County's vibrant downtown areas and its riverfronts. These projects are applicable countywide and include the following improvements:

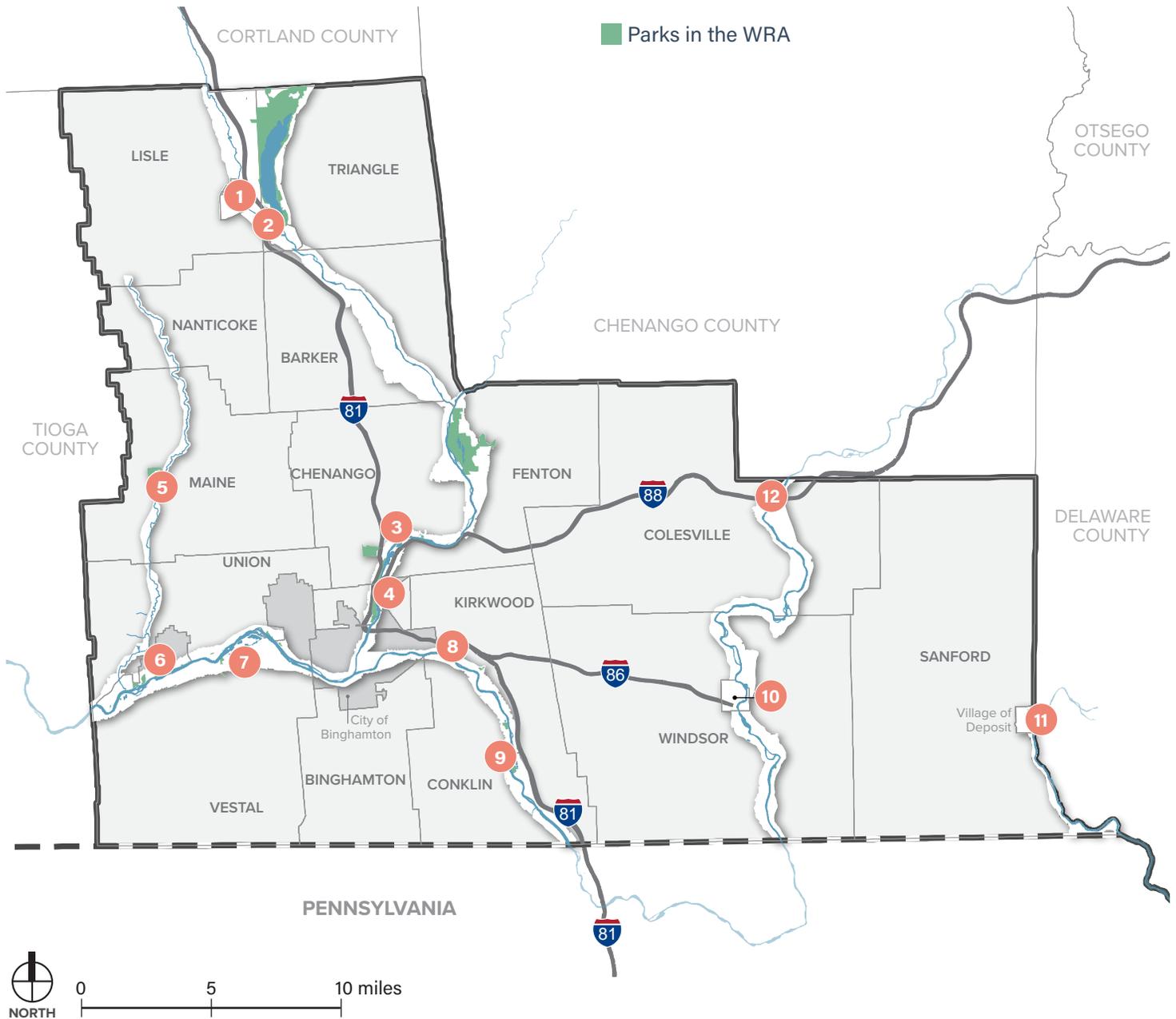
- **Placemaking amenities** that create a welcoming, engaging environment for pedestrians and reflect each downtown's unique character;
- New **multi-modal facilities** (e.g, bike infrastructure, sidewalks, trails) that directly connect downtowns and main streets to the riverfront;
- Identification of new **gateway locations**;
- New **wayfinding signage** to improve visual connectivity between downtown centers and the riverfronts;
- Identify locations to enhance outdoor dining, waterfront viewing, and parking accommodations; and,
- Integration of **green infrastructure** into the streetscape to reduce flooding, improve water quality, and enhance aesthetics.

## PROPOSED LOCATIONS

Eight different corridors have been identified for Streetscape Enhancement projects:

- **Main Street** in the Village of Whitney Point
- **Route 11** in the Village of Whitney Point
- **Conklin Road** in the Town of Conklin
- **Front Street** in the Town of Chenango
- **Chenango Street** in the Village of Port Dickinson
- **Upper Court Street / U.S. 11** in the Town of Kirkwood
- **Main Street** in the Village of Endicott
- **Route 26** in the Town of Maine
- **Vestal Parkway** in the Town of Vestal
- **Main Street / Route 79** in the Village of Windsor
- **Main and Front Streets** in the Village of Deposit
- **Main Street** in Harpursville
- **Main Street** in the Village of Lisle

## STREETSCAPE ENHANCEMENTS



- |  |   |
|--|---|
| 1 Main Street, Village of Lisle              | 7 Vestal Parkway, Town of Vestal                    |
| 2 Main Street, Village of Whitney Point      | 8 Upper Court Street/U.S. 11, Town of Kirkwood      |
| 3 Front Street, Town of Chenango             | 9 Conklin Road, Town of Conklin                     |
| 4 Chenango Street, Village of Port Dickinson | 10 Main Street, Village of Windsor                  |
| 5 Route 26, Town of Maine                    | 11 Main Street and Front Street, Village of Deposit |
| 6 Main Street, Village of Endicott           | 12 Main Street, Harpursville                        |

## SECTION 4.2 | PROPOSED PROJECTS

# STREETSCAPE ENHANCEMENTS



### Location:

Countywide

### Jurisdiction:

Varies

### Applicable LWRS Policies:

#### Development

Policies 1 and 4

#### Public Access

Policy 19

#### Historic & Scenic Resources

Policy 25

### Timeframe:

Mid-Term: 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- New York Main Street Program
- Green Innovation Grant Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

Streetscape enhancement projects focus on upgrading and expanding multi-modal infrastructure and integrating new wayfinding signage systems to improve connectivity between downtown centers and the riverfront throughout the WRA. Downtown corridors where streetscape enhancements are proposed are identified on the previous pages.

These projects include the integration of enhanced pedestrian walkability and multimodal enhancements as well as placemaking amenities and green infrastructure into the streetscape. Streetscape amenities, such as benches, lighting, bicycle racks, and planters, all contribute to a walkable, vibrant downtown and can be customized to reflect a downtown's unique identity including improvements to enhance viewing opportunities and experience along the waterfront. Green infrastructure, such as street trees and bioswales, help manage stormwater runoff, improve air quality, reduce the urban heat island effect, and improve streetscape aesthetics.

### BENEFITS

This proposed project is expected to provide the following benefits:

- Enhanced connectivity between economic centers and riverfronts;
- Improved pedestrian and bicycle access and safety;
- Enhanced sense of place; and
- Expanded tourism opportunities.

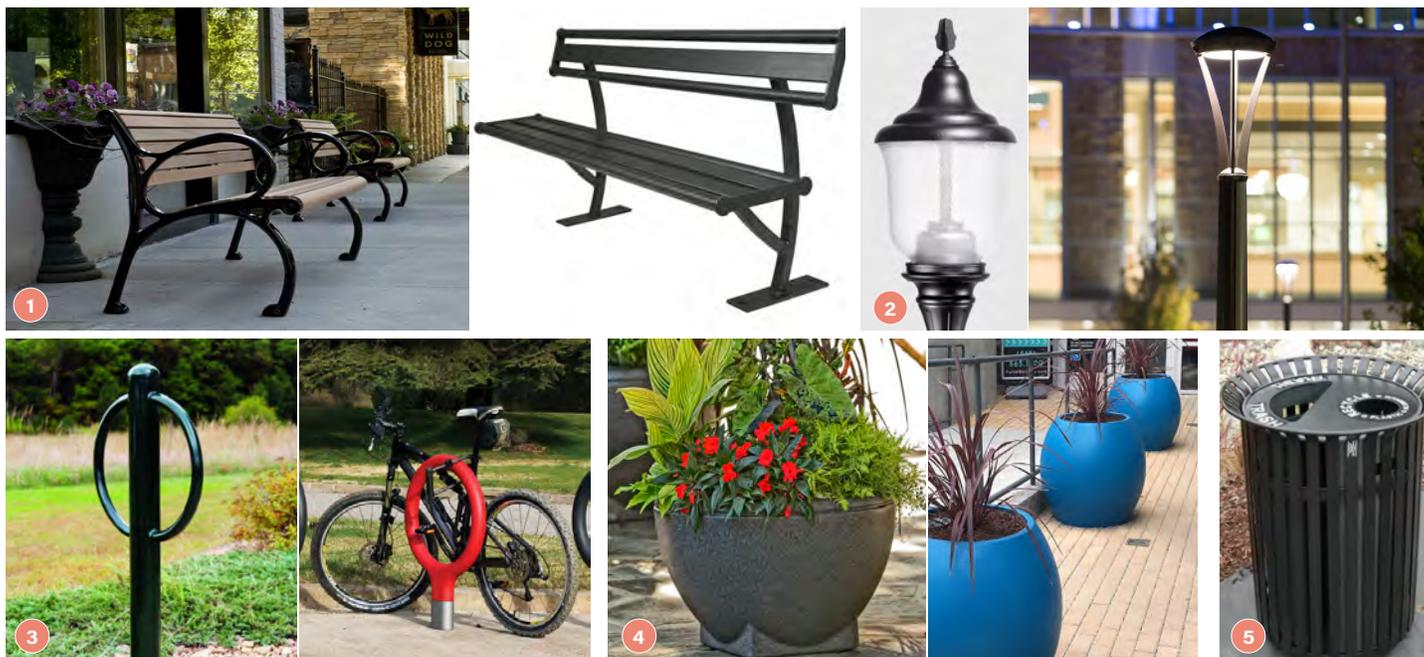
### REGULATORY REQUIREMENTS

The following would be required for project implementation:

- Approvals from local municipalities
- NYS DOT Highway Work Permit on State roads
- New York State Office of Historic Preservation coordination in historic districts
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity



Proposed Streetscape Enhancements in the Along Main Street in the Village of Windsor



**Representative Imagery Photo Credit:** **Classic Park Bench:** (Plainwell Bench) Landscape Forms Inc.; **Modern Park Bench:** (Penn) Keystone Ridge Designs; **Classic Light:** (D650SRLED Boulevard) Sternberg Lighting; **Modern Light:** (Alcott Area Light) Landscape Forms Inc.; **Classic Bicycle Rack:** (Post & Ring Bike Rack) Adventure Playground Systems; **Modern Bicycle Rack:** (Key Bike Rack) Landscape Forms Inc.; **Classic Planter:** (Rosa Planter) Landscape Forms Inc.; **Modern Planter:** (Aquarian Collection) Tournesol; **Trash Receptacle:** (Downtown Collection) Tournesol



# PROPOSED PROJECTS: **PARK AND OPEN SPACE IMPROVEMENTS**

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## OVERVIEW

Park Improvements projects focus on enhancing riverfront recreational opportunities throughout the WRA. These projects focus on increasing public access to the riverfront, expanding trail systems, and expanding recreational amenities to better serve a diversity of users. Park and open space improvements should be designed with community input to ensure inclusivity and meet the diverse needs of users. Wayfinding signage is proposed in all projects to improve park visibility and support the Blueway Plan.

Given the riverfront location of these parks and their importance in supporting native ecosystems and providing flood storage capacity, shoreline restoration, native plantings, and invasive species management are also proposed elements of each project.

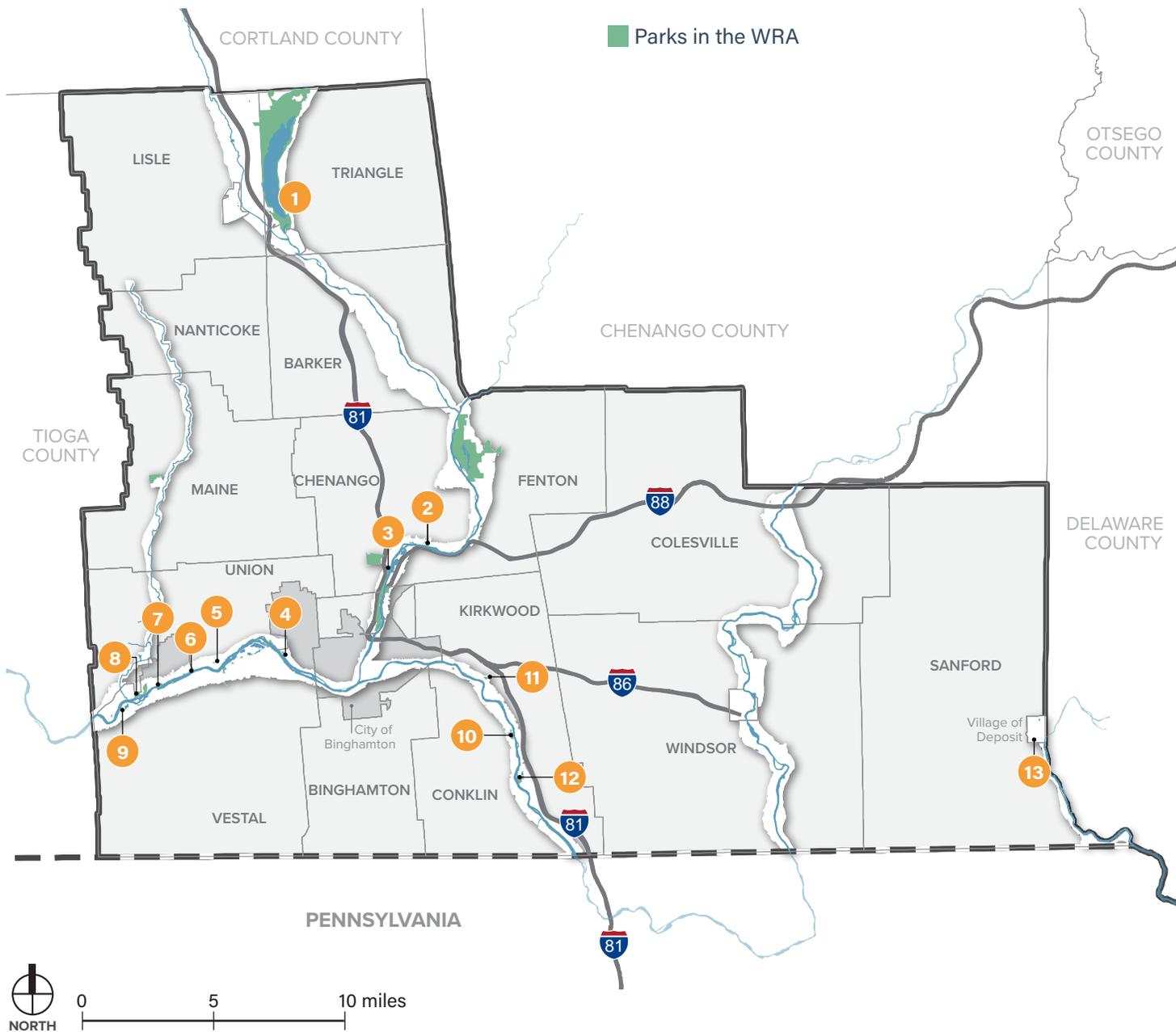
## PROPOSED PROJECTS

Thirteen projects are proposed in this section, including:

- **Dorchester Park** in the Town of Triangle
- **Chenango Bridge Park** in the Town of Chenango
- **Otsiningo North Park** in the Town of Chenango
- **Boland Park** in the Village of Johnson City
- **Argonne Avenue Park** in the Town of Union
- **Riverview Park** in the Village of Endicott

- **Mersereau Park** in the Village of Endicott
- **Grippen Park** in the Village of Endicott
- **Castle Gardens Park** in the Town of Vestal
- **Schnurbusch Park** in the Town of Conklin
- **Valley Park** in the Town of Kirkwood
- **Veterans River Park** in the Town of Kirkwood
- **Fireman's Field Park** in the Village of Deposit

# PARK IMPROVEMENTS



- |                               |                              |                                |
|-------------------------------|------------------------------|--------------------------------|
| <b>1</b> Dorchester Park      | <b>6</b> Riverview Park      | <b>11</b> Valley Park          |
| <b>2</b> Chenango Bridge Park | <b>7</b> Mersereau Park      | <b>12</b> Veterans River Park  |
| <b>3</b> Otsiningo Park North | <b>8</b> Grippen Park        | <b>13</b> Fireman's Field Park |
| <b>4</b> Boland Park          | <b>9</b> Castle Gardens Park |                                |
| <b>5</b> Argonne Avenue Park  | <b>10</b> Schnurbusch Park   |                                |

## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## DORCHESTER PARK

### Location:

5469 NY-26  
Whitney Point, NY 13862

### Jurisdiction:

Broome County

### Applicable LWRS Policies:

#### Development

Policies 1 and 2

#### Fish and Wildlife

Policies 8a and 9

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 21, 21a, and 22

#### Historic & Scenic Resources

Policy 25

### Estimated Cost:

Final design cost will vary by  
project scope: \$30,000-\$100,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Dorchester Park is a waterfront park located on Whitney Point Lake providing important public water access and recreational amenities in the Town of Triangle. This project focuses on improving waterfront recreation access for all users and trail connectivity. The following improvements are recommended:

- New park signage that improves the visibility of the park from the roadway;
- Improved trail connectivity to include an expanded trail system to continue around the lake, interpretive signage, and trailheads;
- Recreational amenity upgrades, including an expanded playground to include natural play elements and picnic area;
- Enhanced waterfront access, including an ADA accessible kayak boat launch; and
- Restoration and preservation of the existing riparian buffer to include native landscaping throughout the park to aid in flood mitigation and improve ecological health.

### BENEFITS

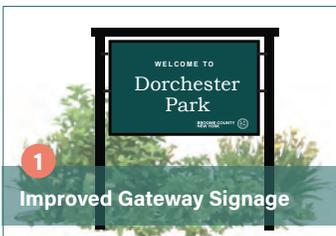
This proposed project is expected to provide the following benefits:

- Enhanced public access to the waterfront
- Shoreline restoration and invasive species management
- Expanded recreational amenities
- Improved multi-modal connectivity

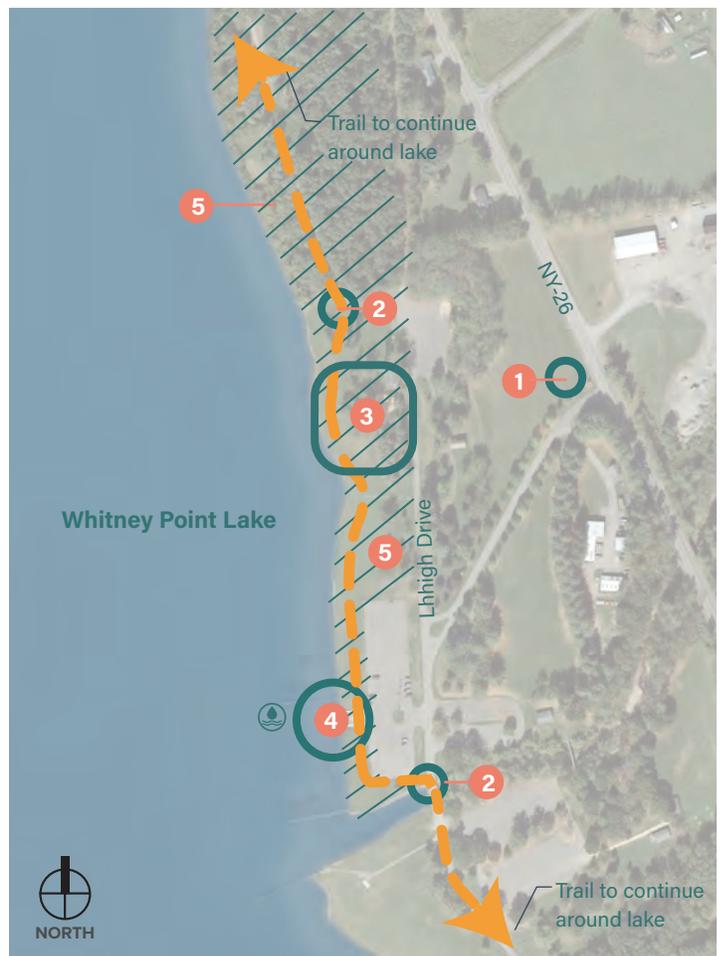
### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



REPRESENTATIVE IMAGES



## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## CHENANGO BRIDGE PARK

### Location:

726 River Road  
Binghamton, NY 13901

### Jurisdiction:

Town of Chenango

### Applicable LWRS Policies:

#### Development

Policies 1 and 2

#### Fish and Wildlife

Policies 8a and 9

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policy 21, 21a, and 22

#### Historic & Scenic Resources

Policy 25

### Estimated Cost:

**Final design cost will vary by project scope:** \$30,000-\$100,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Chenango Bridge Park provides important public water access and recreational amenities to Chenango River. This project focuses on improving access to and circulation within the park, restoring and rehabilitating the shoreline and riparian buffer, expanding recreational amenities, and creating new opportunities for public access to the river. The following improvements are recommended:

- New park signage that improves the visibility of the park from the roadway;
- Improved vehicular and pedestrian circulation, including an expanded entry drive to accommodate two-way traffic and the creation of a new permeable parking lot and walking paths providing access to the waterfront and recreational amenities;
- Recreational amenity upgrades, including an expanded playground and regraded sports fields;
- Enhanced waterfront access, including a small fishing dock and river overlooks; and
- Restoration and preservation of the existing forested riparian buffer and integration of green infrastructure throughout the park to mitigate flood events and improve ecological health.

### BENEFITS

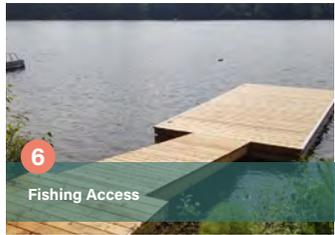
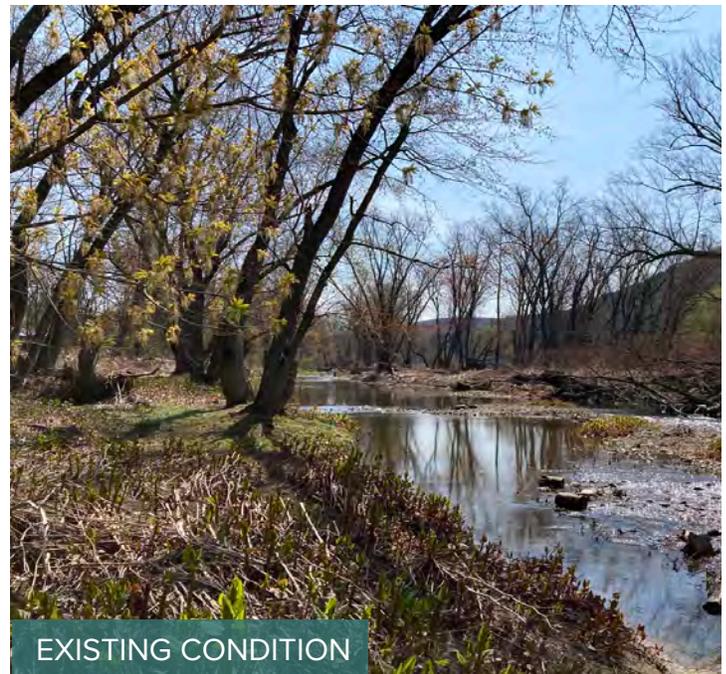
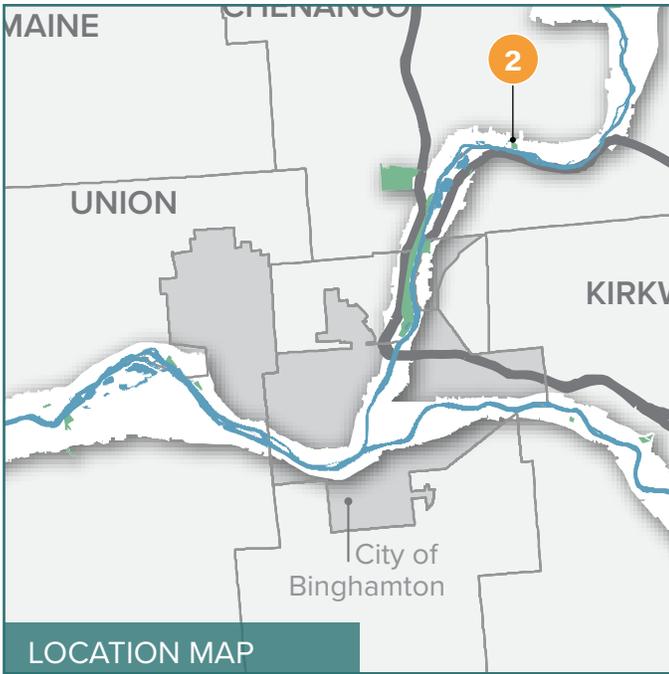
This proposed project is expected to provide the following benefits:

- Enhanced public access to the waterfront;
- Shoreline restoration and invasive species management;
- Expanded recreational amenities; and,
- Improved multi-modal connectivity.

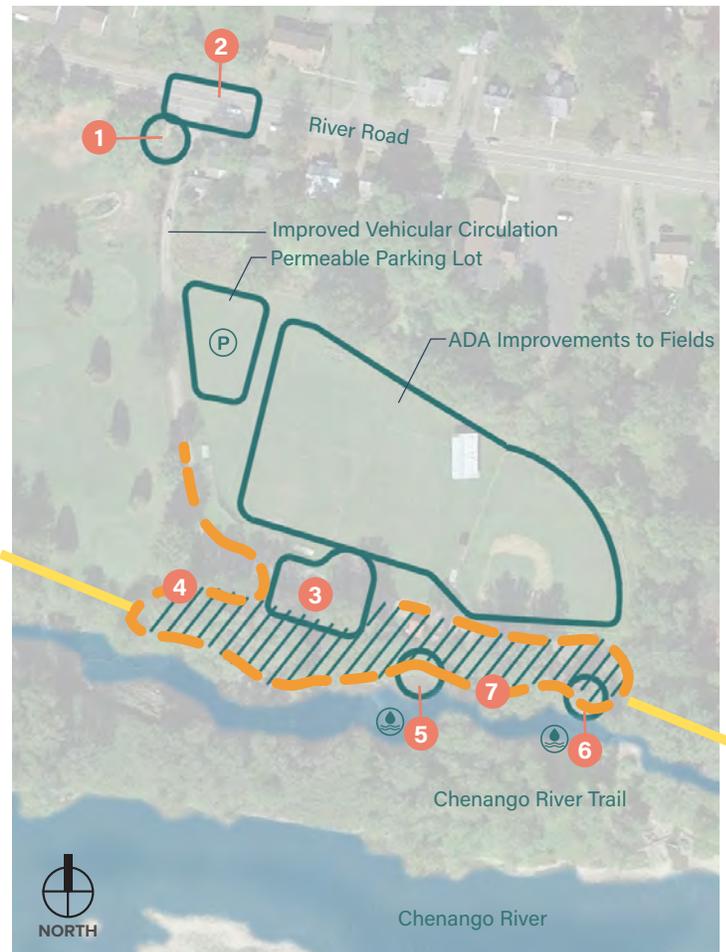
### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



REPRESENTATIVE IMAGES



Waterfront Access    Riparian Buffer    Proposed Trail  
Parking improvements

## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## OTSININGO PARK NORTH

### Location:

Howell Drive  
Binghamton, NY 13901

### Jurisdiction:

Town of Chenango

### Applicable LWRS Policies:

**Development**  
Policy 1

**Fish and Wildlife**  
Policy 8a

**Flood and Erosion Hazards**  
Policies 12, 14, and 17

**Public Access**  
Policy 20

**Recreation**  
Policy 22

### Estimated Cost:

Final design cost will vary by project  
scope: \$50,000-\$100,000

### Timeframe:

Short-term, less than 5 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Otsiningo Park North is quiet park known for its soccer fields and accessible trail south to Otsiningo County Park. Proposed park improvements focus on expanding recreational amenities to bring more diverse user groups to the park as well as enhancing the park's connection to the Chenango River and its trail network. The following improvements are recommended:

- New park signage that improves the visibility of the park from the roadway;
- New trailhead along the existing paved trail to Otsiningo County Park;
- A new trail system to expand access to the adjacent riverfront;
- Recreational amenity upgrades, including a new dog park;
- Enhanced waterfront access, including an elevated board walk with an overlook; and
- Rain garden infrastructure to capture stormwater; and
- Enhanced pedestrian connection to Front Street on Howell Drive.

### BENEFITS

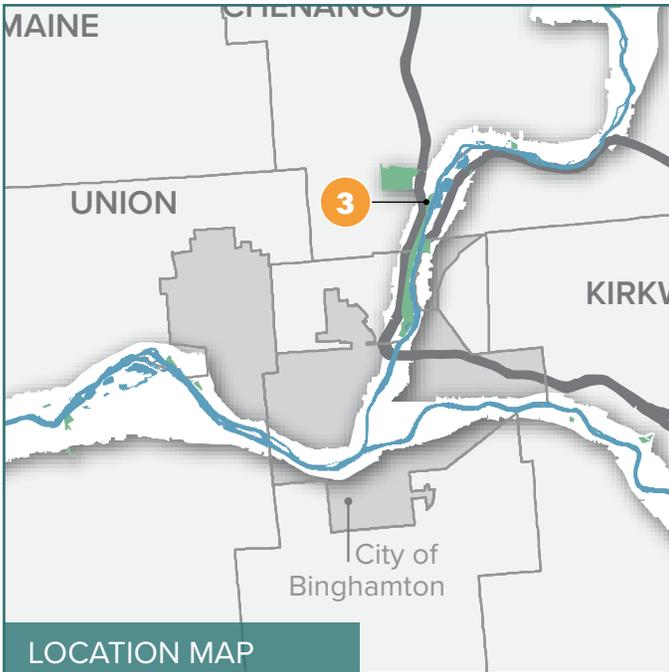
This proposed project is expected to provide the following benefits:

- Enhanced public access to the waterfront
- Shoreline restoration and invasive species management
- Expanded recreational amenities
- Improved multi-modal connectivity

### REGULATORY REQUIREMENTS

The following will be required for project implementation:

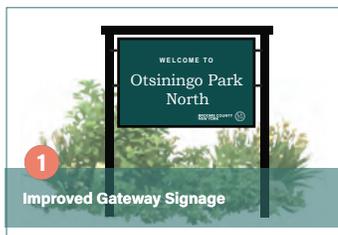
- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



LOCATION MAP



EXISTING CONDITION



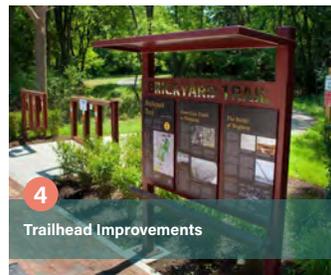
1 Improved Gateway Signage



2 Dog Park

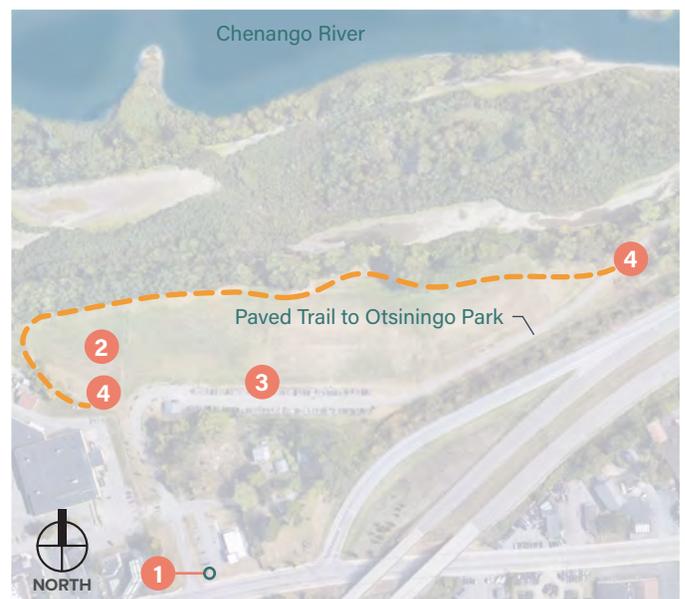


3 Rain Gardens



4 Trailhead Improvements

REPRESENTATIVE IMAGES



— Proposed Trail

## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## BOLAND PARK

### Location:

501 Boland Drive  
Johnson City, NY 13790901

### Jurisdiction:

Village of Johnson City

### Applicable LWRS Policies:

#### Development

Policy 1

#### Fish and Wildlife

Policy 8a

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policy 20

#### Recreation

Policies 21, 21a, and 22

### Estimated Cost:

Final design cost will vary by project  
scope: \$20,000-\$50,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Boland Park's close proximity to the County's two rail trails and the Susquehanna River provides a unique opportunity to provide more than just a neighborhood park. Park improvements proposed for Boland Park include improved multi-modal connectivity to the Vestal and Johnson City Rail Trails, expanded park amenities, enhanced waterfront access, and shoreline restoration and management. The following improvements are recommended:

- Park signage that improves the arrival experience and creates a more welcoming public space;
- Recreational amenity upgrades, including new or re-surfaced multi-use athletic courts and an expanded playground;
- Enhanced waterfront access, including a looping trail along the park's waterfront; and
- Restoration and preservation of the existing forested riparian buffer and integration of green infrastructure throughout the park to mitigate flood events and improve ecological health.

### BENEFITS

This proposed project is expected to provide the following benefits:

- Enhanced multi-modal connectivity to the Vestal and Johnson City Rail Trails;
- Expanded recreational opportunities;
- Shoreline restoration and invasive species management;
- Enhanced public access to waterfront; and,
- Creation of expanded views of waterfront.

### REGULATORY REQUIREMENTS

The following will be required for project implementation:

The following will be required for project implementation:

- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



LOCATION MAP



EXISTING CONDITION



REPRESENTATIVE IMAGES



## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## ARGONNE AVENUE PARK

### Location:

Town of Union

### Jurisdiction:

Local

### Applicable LWRS Policies:

#### Development

Policy 1

#### Fish and Wildlife

Policy 8a

#### Flood and Erosion Hazards

Policies 11, 12, 14, and 17

#### Public Access

Policy 20

#### Recreation

Policy 22

### Estimated Cost:

Final design cost will vary by project scope: \$25,000-\$50,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Park improvements proposed for Argonne Avenue Park build off park improvements proposed in the County's NY Rising Community Reconstruction Plan. The plan called for relocated or elevated homes, new (elevated) townhouse development, walking paths, and bio-retention areas for flood storage. In addition to the recommendations in the County's NY Rising Plan, the following improvements are also recommended:

- Park signage and trailhead that improves the arrival experience that creates a more welcoming public space;
- Enhanced waterfront access, including a looping trail along the park's riverfront with interpretive and educational displays;
- New recreational amenities, such as a natural playground; and,
- Community gardens that improve access to healthy food and support a sense of community.

### BENEFITS

This proposed project is expected to provide the following benefits:

- Enhanced recreational facilities;
- Enhanced public access to the riverfront; and,
- New flood resilient housing

### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity



- Waterfront Access
- Proposed Trail
- Parking Improvements

## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## RIVERVIEW PARK

### Location:

1610 Riverview Drive  
Endicott, NY 13760

### Jurisdiction:

Local

### Applicable LWRS Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21, 21a, and 22

### Estimated Cost:

Final design cost will vary by project  
scope: \$40,000-\$90,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Building upon recent park upgrades (new signage and seating), the park improvements proposed for Riverview Park enhance regional multi-modal connectivity and public access to the riverfront. With its location along the Susquehanna River, the park often experiences seasonal flooding and erosion. Proposed park improvements also focus on restoring and reinforcing the park's riparian edge through nature-based shoreline stabilization methods, improving riverfront access, and expanding recreational amenities. The following improvements are recommended:

- Parking lot improvements, including permeable pavement and rain gardens, to manage stormwater runoff;
- Enhanced park amenities, including a waterfront multi-use path connecting to the Chugnut Trail and an expanded overlook to include additional picnic and seating areas for gatherings;
- Enhanced recreational waterfront access to include an accessible personal watercraft boat launch and an area for recreational fishing;
- Restoration and preservation of the riparian buffer and integration of green infrastructure throughout the park to mitigate flood events and improve ecological health; and
- Creation of a new trailhead to provide enhanced access to the Chugnut Trail system. See Section X on page X for more information about proposed improvements to the Chugnut Trail.

### BENEFITS

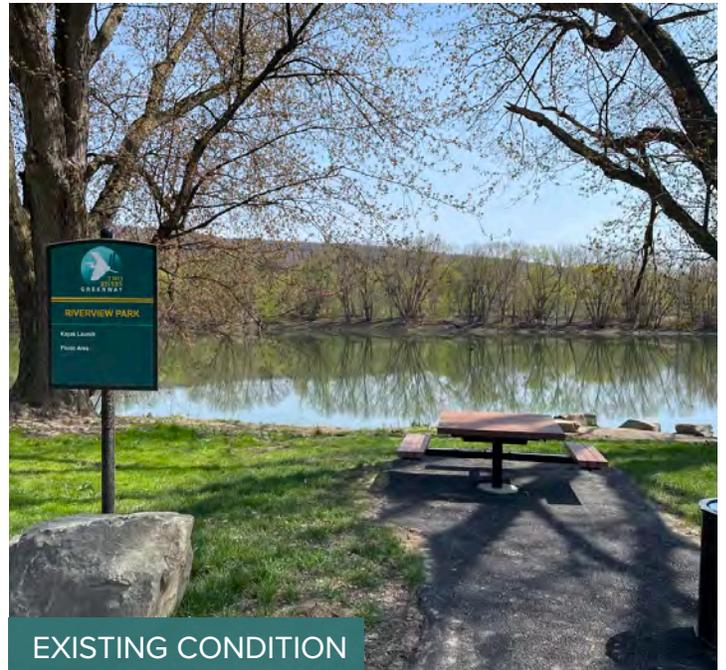
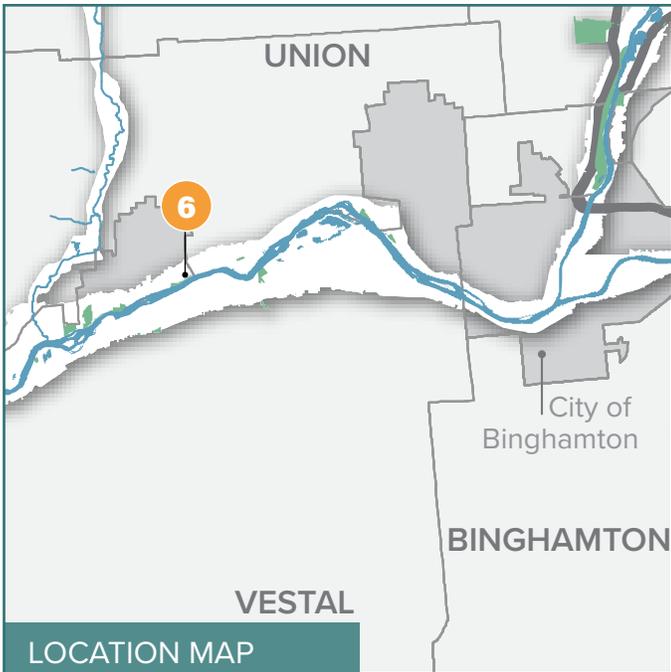
This proposed project is expected to provide the following benefits:

- Improved regional multi-modal connectivity;
- Enhanced public recreational access to the riverfront;
- Enhanced connectivity between waterfront resources; and,
- Expanded tourism opportunities

### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



- 1 Parking improvements
- 3 Overlook plaza
- 5 Minor Boat Launch
- 2 Riverwalk trail
- 4 Riparian buffer
- 6 Trailhead

REPRESENTATIVE IMAGES



- Waterfront Access
- Riparian Buffer
- Proposed Trail
- Parking Improvements

## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## MERSEREAU PARK

### Location:

Village of Endicott

### Jurisdiction:

Local

### Applicable LWRS Policies:

#### Development

Policy 1

#### Flood and Erosion Hazards

Policies 12 and 17

#### Public Access

Policy 20

#### Recreation

Policies 21, 21a, and 22

### Estimated Cost:

Final design cost will vary by project

scope: \$20,000-\$50,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Located along the Susquehanna, Mersereau Park's levee, which forms the southern boundary of the park, serves as a protective barrier between potential floodwaters and a large residential community. Although the levee provides important flood control, it also limits visual and physical access to the Susquehanna River. Project improvements for Mersereau Park focus on enhancing visual access to the river and expanding recreational amenities. The following improvements are recommended:

- A new multi-use trail on top of the flood levee, from Riverview Terrace west to South Liberty Avenue. This new trail would be part of the western extension of the Chugnut Trail;
- Upgraded and expanded play areas; and
- Restoration of the riparian buffer, to the extent possible along the levee and integration of green infrastructure throughout the park for overall flood mitigation and ecological health.

### BENEFITS

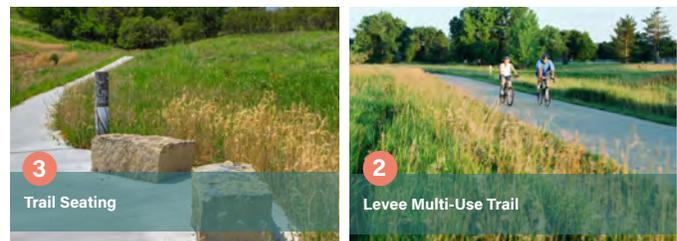
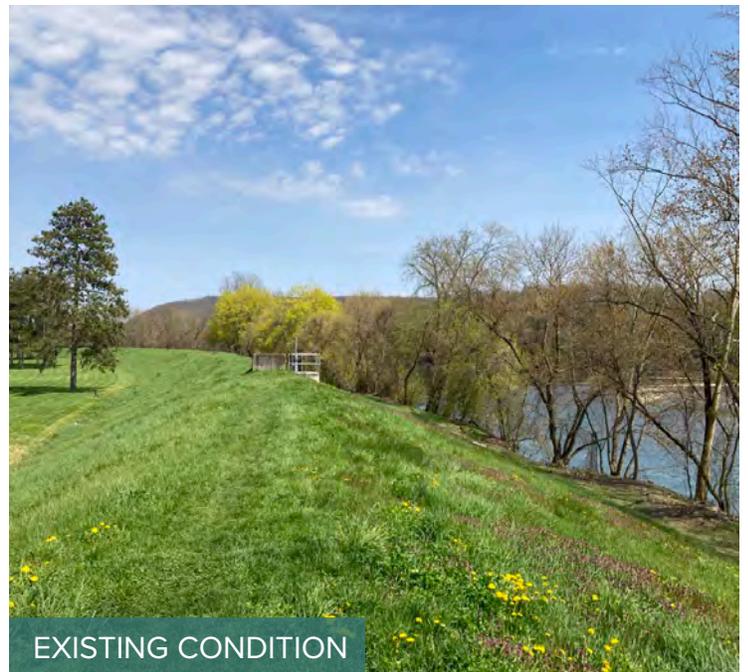
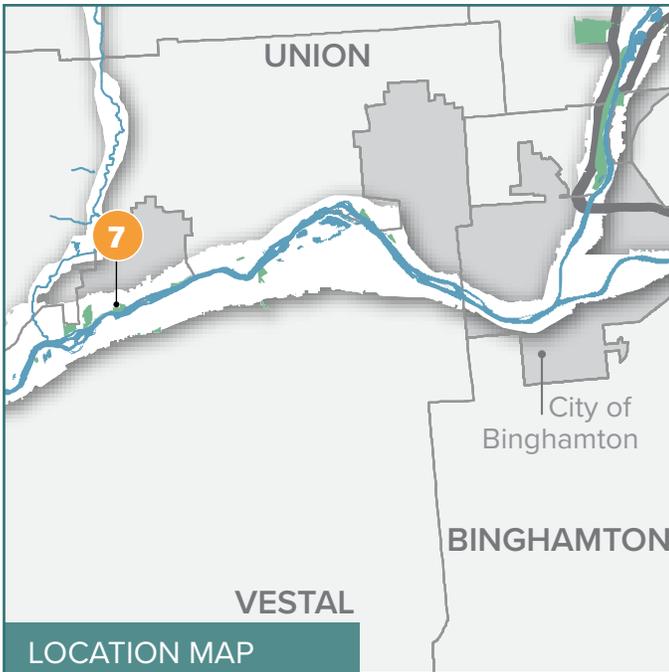
This proposed project is expected to provide the following benefits:

- Improved regional multi-modal connectivity;
- Enhanced public access to the Susquehanna River;
- Expanded recreational resources; and
- Increased tourism opportunities

### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- Article 16 flood control land use permit
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## GRIPPEN COUNTY PARK

### Location:

Village of Endicott

### Jurisdiction:

Broome County

### Applicable LWRS Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21, 21a, and 22

### Estimated Cost:

Final design cost will vary by project scope: \$60,000-\$120,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Grippen Park is part of the County's park network that offers various amenities including a baseball field, playground, a large pavilion, a recently enhanced boat launch, and plans to rehabilitate the current facility building to an indoor multi-purpose space. This project focuses on expanding open green space, recreational access, use, and connectivity. Additional user amenities would be added to include bike racks, benches, water stations, public art, and trash receptacles. The following improvements are recommended:

- Improved gateway signage to reinforce park identity and provide a more welcoming aesthetic to the park's entrance;
- Parking improvements to include permeable paving, tree and native plantings;
- Enhanced park information and café expansion within the Recreation Building;
- Field evaluation and consideration for a multi-purpose field replacement to serve other sports in addition to its current use as a baseball field;
- Expand the playground to include a variety of natural play elements to enhance the park's inclusivity;
- Expand upon the picnic area to include a series of small pavilions to support gatherings;
- Provide enhanced connections to the waterfront and incorporate native plant materials to provide green infrastructure and flood mitigation practices; and
- Provide trail expansion and linkages to the proposed Chugnut Trail network.

### BENEFITS

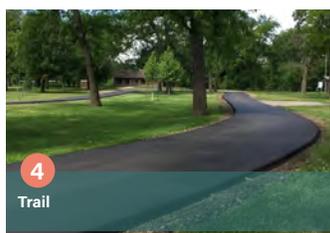
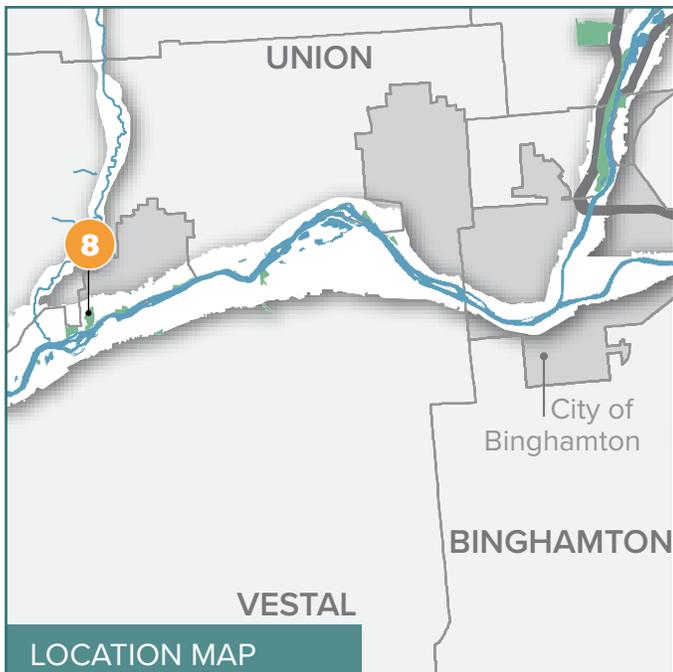
This proposed project is expected to provide the following benefits:

- Expanded recreational amenities and facilities;
- Improved multi-modal connectivity;
- Enhanced public access to the waterfront;
- Shoreline restoration and flood mitigation; and
- Increased tourism opportunities

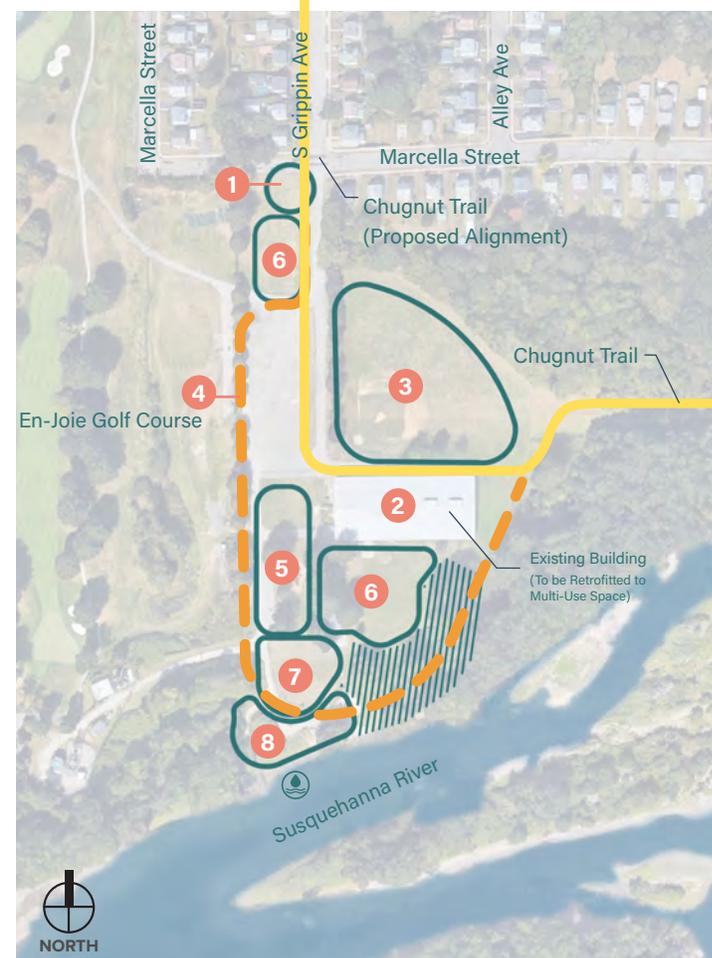
### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



REPRESENTATIVE IMAGES



Waterfront Access    Riparian Buffer    Proposed Trail

## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## CASTLE GARDENS PARK

### Location:

Castle Gardens Road  
Vestal, NY 13850

### Jurisdiction:

Local

### Applicable LWRS Policies:

#### Development

Policy 1

#### Fish and Wildlife

Policy 8a

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policy 20

#### Recreation

Policies 21, 21a, and 22

#### Historic & Scenic Resources

Policy 25

### Estimated Cost:

Final design cost will vary by project  
scope: \$30,000-\$80,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Nestled between two residential neighborhoods and the Susquehanna River, Castle Gardens Park has a unique opportunity to increase its user base through the implementation of several park improvements, including:

- New park signage to create a more welcoming and visible park entrance;
- Parking improvements, to include a formal parking area to allow for non-local visitors and small events;
- An outdoor amphitheater for seasonal mid-sized events and gatherings;
- A new trail network with connections to adjacent neighborhoods, including a raised boardwalk trail in ecologically sensitive areas and along the river's edge to accommodate seasonal flooding;
- Interpretive and educational signage throughout the park and proposed trail system highlighting the importance of this area to indigenous communities;
- Enhanced park lighting to increase safety for all users.

### BENEFITS

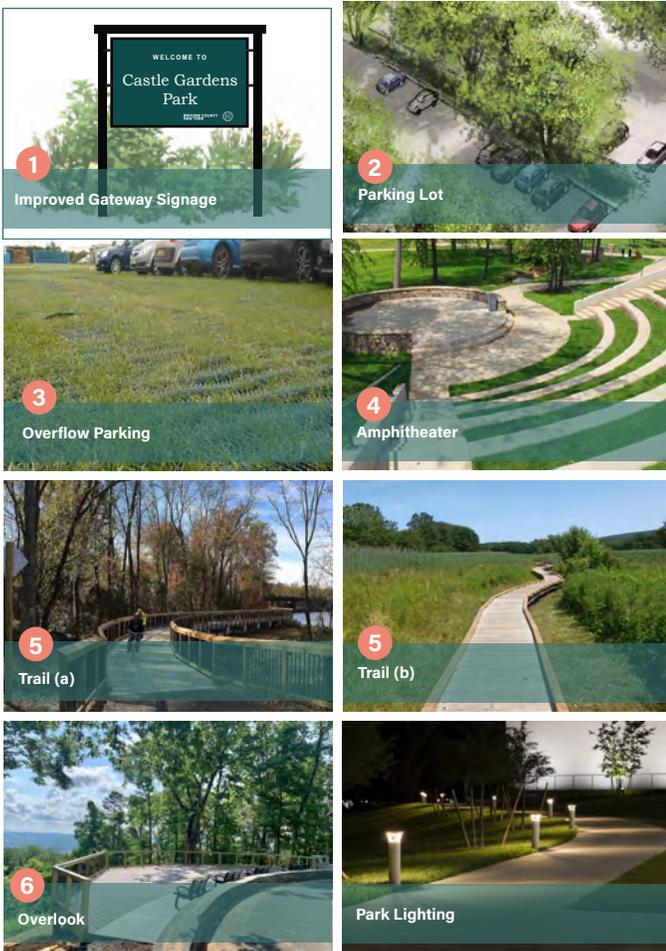
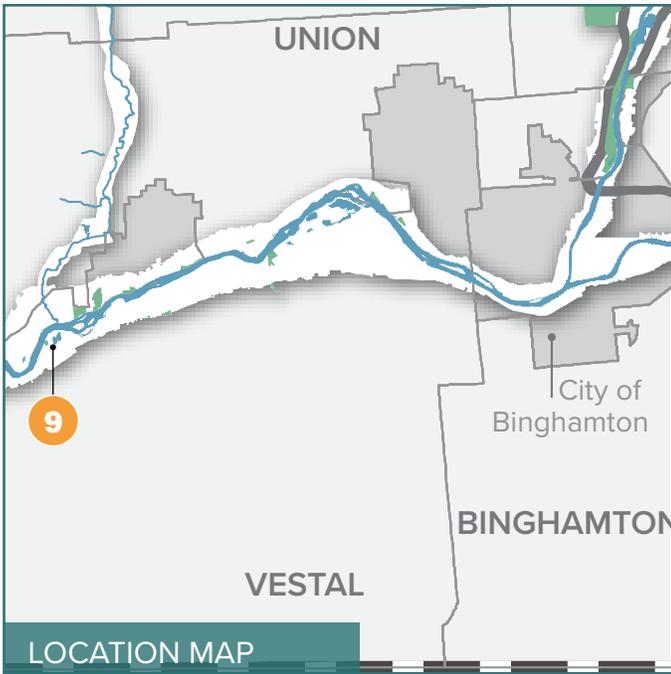
This proposed project is expected to provide the following benefits:

- Enhanced public access to the waterfront;
- Strengthened community connections;
- Shoreline restoration, flood mitigation and invasive species management;
- Scenic overlooks of the Susquehanna River;
- Improved park safety;
- Enhanced quality of life; and,
- Expanded tourism opportunities.

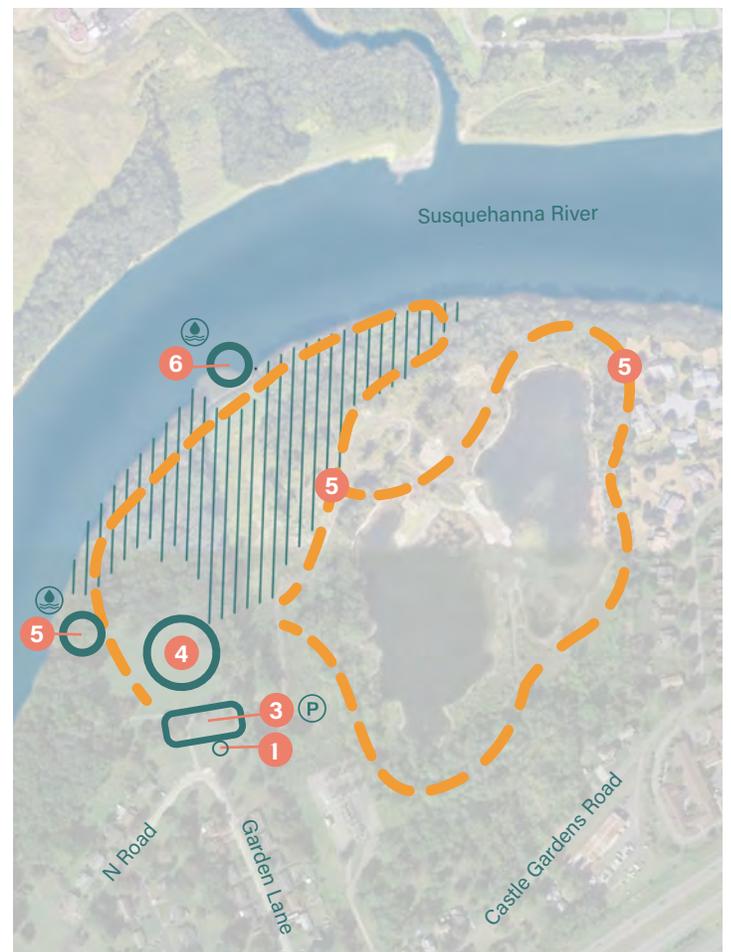
### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



REPRESENTATIVE IMAGES



- Waterfront Access
- Riparian Buffer
- Proposed Trail
- Parking Improvements

## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## SCHNURBUSCH PARK

### Location:

1171 Conklin Road  
Conklin, NY 13748

### Jurisdiction:

Local

### Applicable LWRP Policies:

#### Development

Policies 1 and 4

#### Fish and Wildlife

Policies 8a and 9

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21, 21a, and 22

### Estimated Cost:

Final design cost will vary by project  
scope: \$30,000-\$50,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program
- Recreational Trails Program

### PROJECT DESCRIPTION

Schnurbush Park is a large riverfront park in Conklin with diverse recreational amenities and recent signage upgrades as part of the Two Rivers Greenway project. However, even with its close proximity to the Susquehanna River, Schnurbusch Park lacks adequate waterfront access. Park improvements proposed for Schnurbusch Park focus on connecting the park and its amenities to the Susquehanna riverfront. The following park improvements are recommended:

- Parking improvements, to include a formal parking area with a trailhead;
- Expanded waterfront recreational amenities to include an accessible boat launch for personal water crafts, dock and overlook for recreational fishing and enhanced scenic views;
- Integration of interpretive signage to provide educational information about native plant and animal species;
- A new trail loop linking the park to the riverfront; and
- An expanded playground to incorporate natural play elements and features.

### BENEFITS

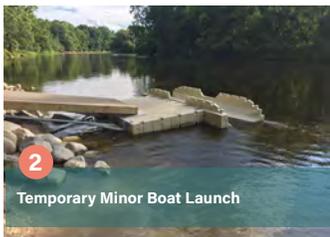
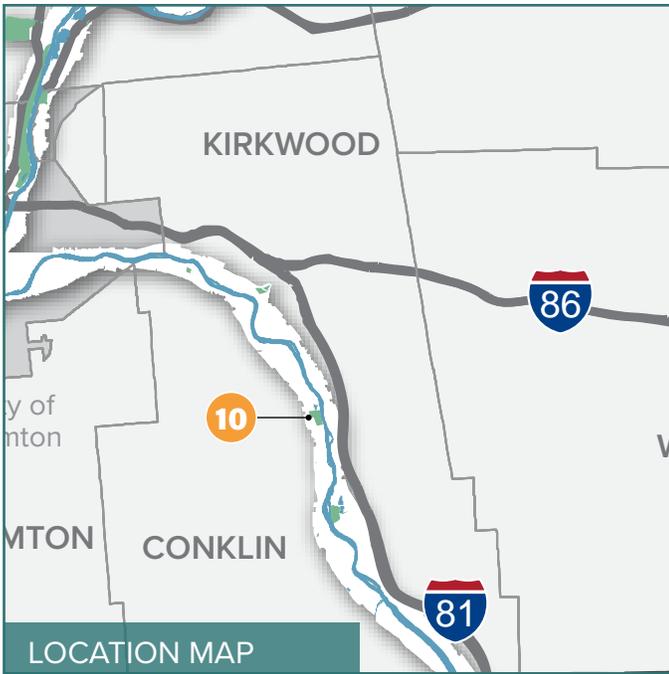
This proposed project is expected to provide the following benefits:

- Enhanced public access to the waterfront;
- Expanded waterfront recreational amenities;
- Shoreline restoration, flood mitigation and invasive species management; and,
- Increased tourism opportunities.

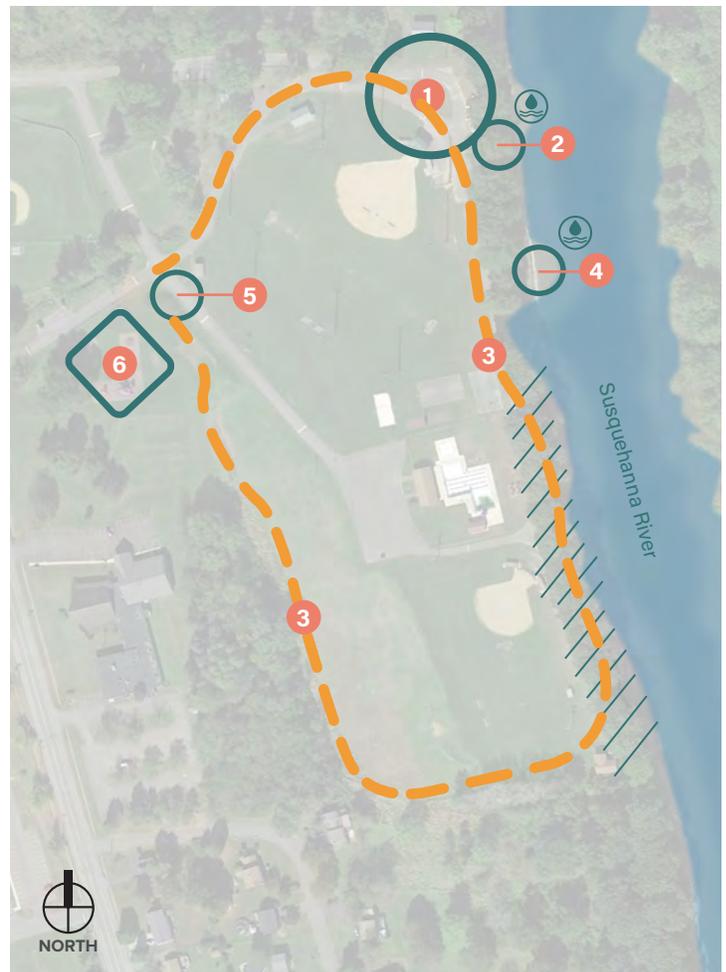
### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



REPRESENTATIVE IMAGES



Waterfront Access    Riparian Buffer    Proposed Trail

## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## VALLEY PARK

### Location:

6 Frances Street  
Kirkwood, NY 13795

### Jurisdiction:

Local and State

### Applicable LWRs Policies:

#### Development

Policy 1

#### Fish and Wildlife

Policy 9

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21, 21a, and 22

#### Historic & Scenic Resources

Policy 25

#### Water and Air Resources

Policy 35

### Estimated Cost:

Final design cost will vary by project  
scope: \$30,000-\$100,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program

### PROJECT DESCRIPTION

Located in the Town of Kirkwood, this park is bisected by Frances Street and bordered by Park Creek, which floods annually. This project focuses on roadway improvements to improve park circulation and restoration of the creek to improve public access and mitigate flooding. The following park improvements are recommended:

- Roadway improvements including traffic calming measures such as traffic humps and pavement markings, crossing infrastructure including at-grade cross walks, advance signage, and user activated rectangular rapid flashing beacons (RRFBs);
- Improved signage and pedestrian amenities (e.g., incorporation of public art) throughout the park;
- Upgraded, universally accessible playground;
- Creek restoration and flood mitigation to include a clearing of Park Creek's outlet point 1,000 feet downstream to a two-acre accumulation of sediment blocking 80% of the width of the Susquehanna, creating a chokepoint and a potential source of backup for Park Creek; and
- Creation of an accessible "Creekwalk", expanding public access to the creek and providing a scenic walking path for visitors, from the Susquehanna River to the covered bridge in Valley Park.

### BENEFITS

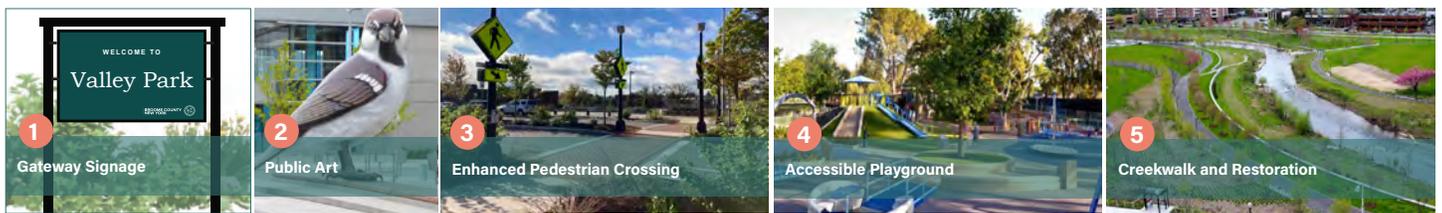
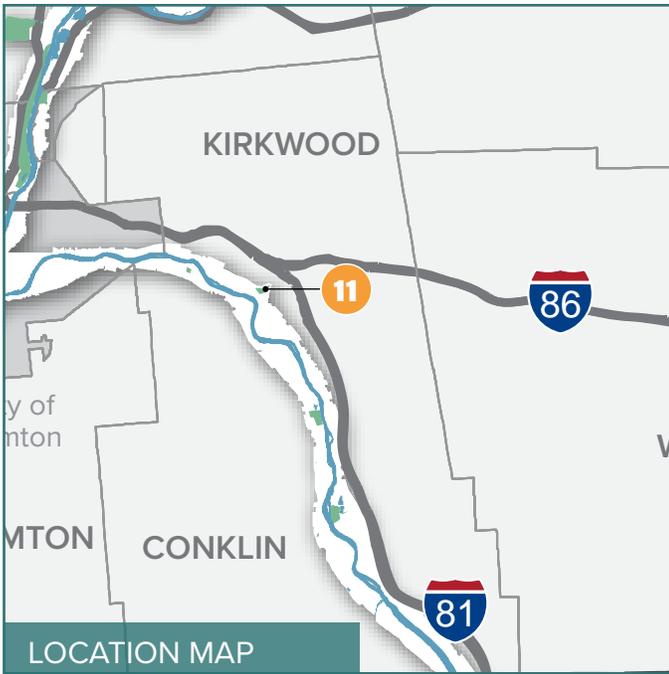
This proposed project is expected to provide the following benefits:

- Enhanced public access waterfront resources;
- Improved pedestrian safety; and
- Expanded waterfront recreational opportunities

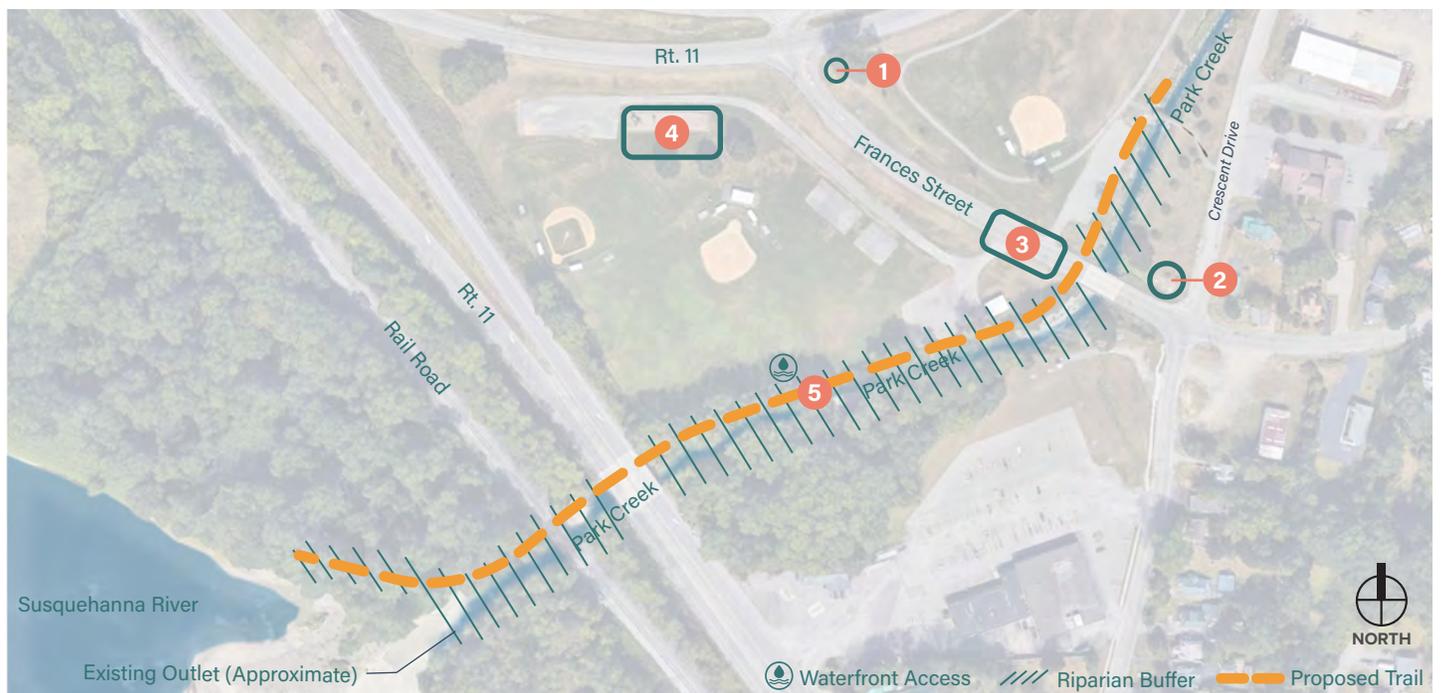
### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- NYS DOT Highway Work Permit
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



REPRESENTATIVE IMAGES



## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## VETERANS RIVER PARK

### Location:

311 Main Street  
Kirkwood, NY 13795

### Jurisdiction:

Local

### Applicable LWRS Policies:

#### Development

Policy 1

#### Fish and Wildlife

Policy 9

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21, 21a, and 22

### Estimated Cost:

Final design cost will vary by  
project scope: \$30,000-\$80,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Green Innovation Grant Program

### PROJECT DESCRIPTION

Veterans River Park's central location in the Town of Kirkwood creates the opportunity to expand existing amenities and increase access to the park's natural resources. Park improvements proposed for Veterans River Park focus on expanding the existing trail network and improving access to the riverfront for recreational and scenic purposes. The following park improvements are recommended for Veterans River Park:

- Signage and wayfinding at the park's entrance and throughout the park;
- Pedestrian and bicycle enhancements to park access road;
- Riverwalk or waterfront trail along the river's edge that includes views to Berkalew Island;
- Shoreline restoration, native plantings, and invasive species management;
- Nature trails in the existing woodland area, including a new trailhead, recreational fishing access, an accessible minor boat launch, and an outdoor classroom or rest areas; and
- An expanded playground to incorporate natural play elements and features.

### BENEFITS

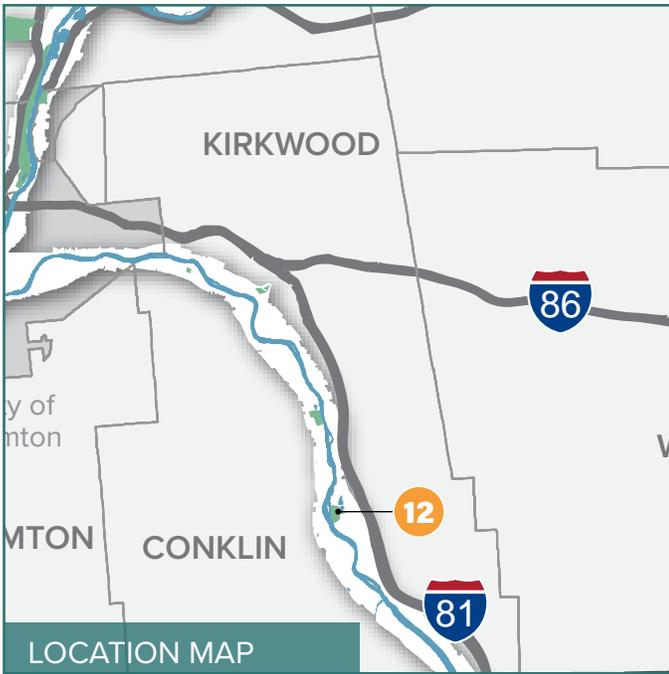
This proposed project is expected to provide the following benefits:

- Shoreline restoration and invasive species management;
- Enhanced public recreational access to the riverfront;
- Expanded recreational amenities;
- Increased access to natural resources; and,
- Expanded tourism opportunities

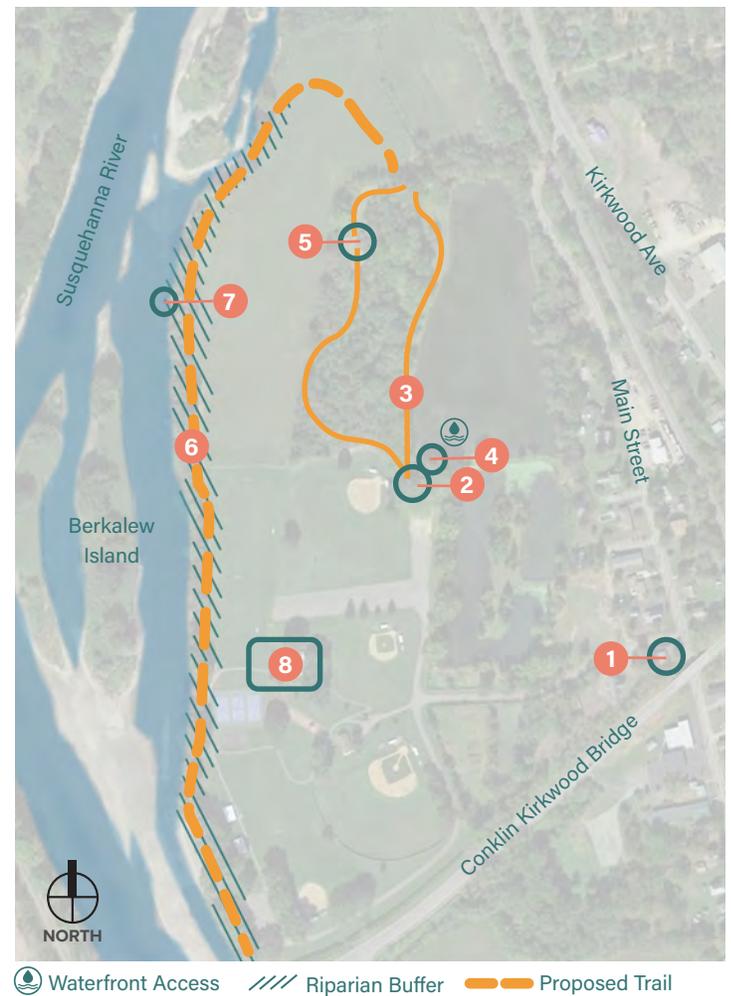
### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Property acquisition or easement(s)
- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Joint Application Form (NYSDEC, OGS, DOS, and USACoE)



REPRESENTATIVE IMAGES



## SECTION 4.2 | PROPOSED PROJECTS

# PARK IMPROVEMENTS



## FIREMAN'S FIELD PARK

### Location:

19 Dublin Street  
Deposit, NY 13754

### Jurisdiction:

Village of Deposit

### Applicable LWRS Policies:

**Development**  
Policy 1

**Flood and Erosion Hazards**  
Policies 12, 14, and 17

**Public Access**  
Policies 19, 19a, and 20

**Recreation**  
Policies 21, 21a, and 22

### Estimated Cost:

Final design cost will vary by  
project scope: \$50,000-\$120,000

### Timeframe:

Mid-term, 5-10 years

### Funding:

New York State

- Environmental Protection Fund

### PROJECT DESCRIPTION

Fireman's Field Park is centrally located in the Village of Deposit and is often used for village recreation and events. Park improvements focus on enhancing current amenities and facilities and improved pedestrian connectivity. The following park improvements are recommended for Fireman's Field Park:

- Signage and wayfinding at the park's entrance and throughout the park;
- Sidewalks and improved pedestrian crossings to better connect the village and adjacent neighborhoods to the park and provide enhanced safety for pedestrians, particularly given the park's adjacency to roads and rail lines;
- Parking improvements, including a formal parking area(s) for large events and improved safety;
- Facility rehabilitation, to include upgraded restrooms and concession area;
- Picnic area to accommodate small and large gatherings;
- Athletic court evaluation and consideration for a multi-purpose court and field replacement to serve other sports in addition to its current use as a baseball field;
- Dedication garden to pay homage to the fireman who built and sponsor the park. The garden would also provide an opportunity to incorporate local art and promote the village's identity; and,
- A new overlook to create access to Deposit's natural resources and waterways.

### BENEFITS

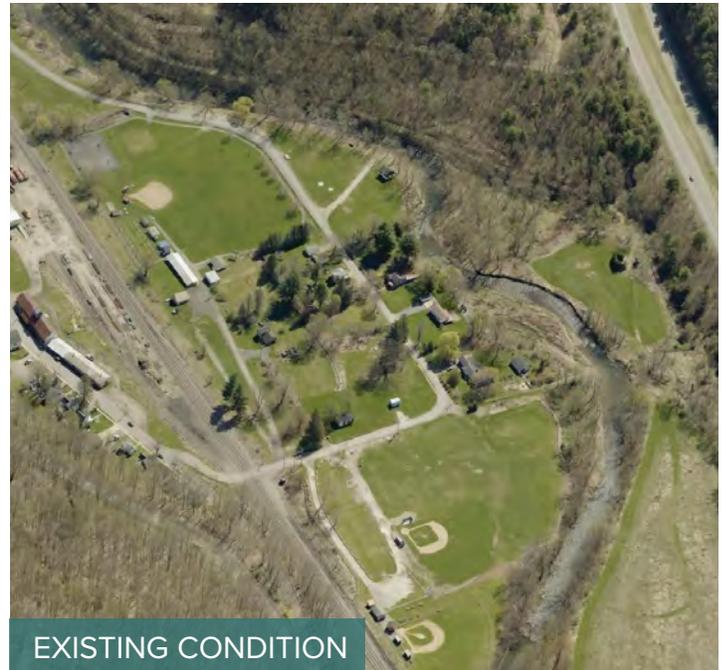
This proposed project is expected to provide the following benefits:

- Improved pedestrian access and safety;
- Enhanced public access to the riverfront; and,
- Expanded recreational amenities

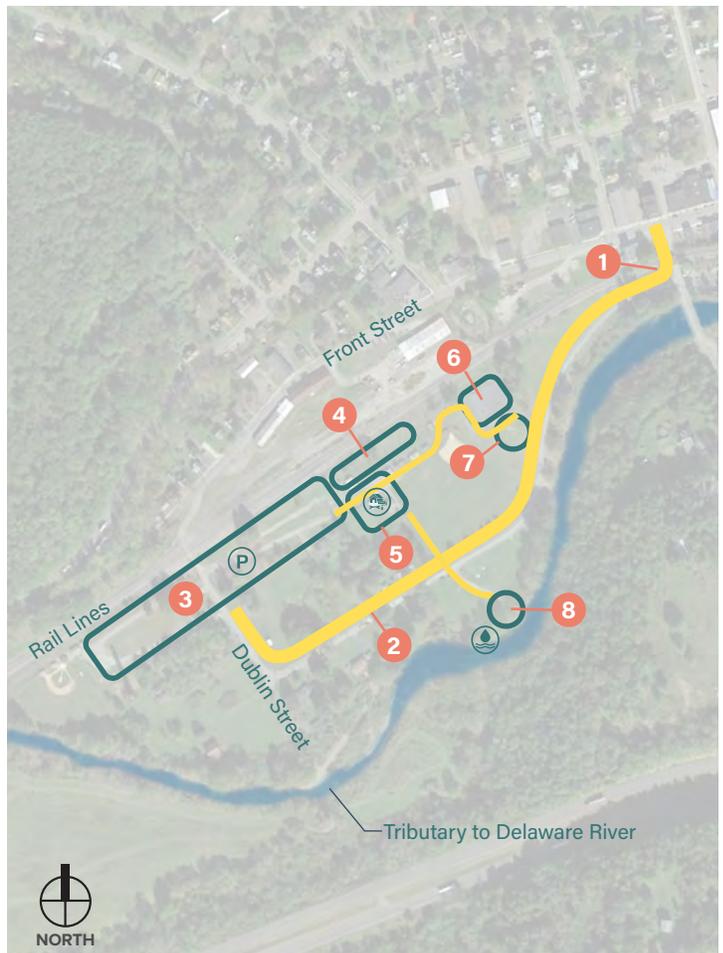
### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity



REPRESENTATIVE IMAGES



- Waterfront Access
- Parking Improvements
- Existing Structure Evaluation
- Sidewalk Improvements



# PROPOSED PROJECTS: **MULTI-PURPOSE INFRASTRUCTURE**

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## **OVERVIEW**

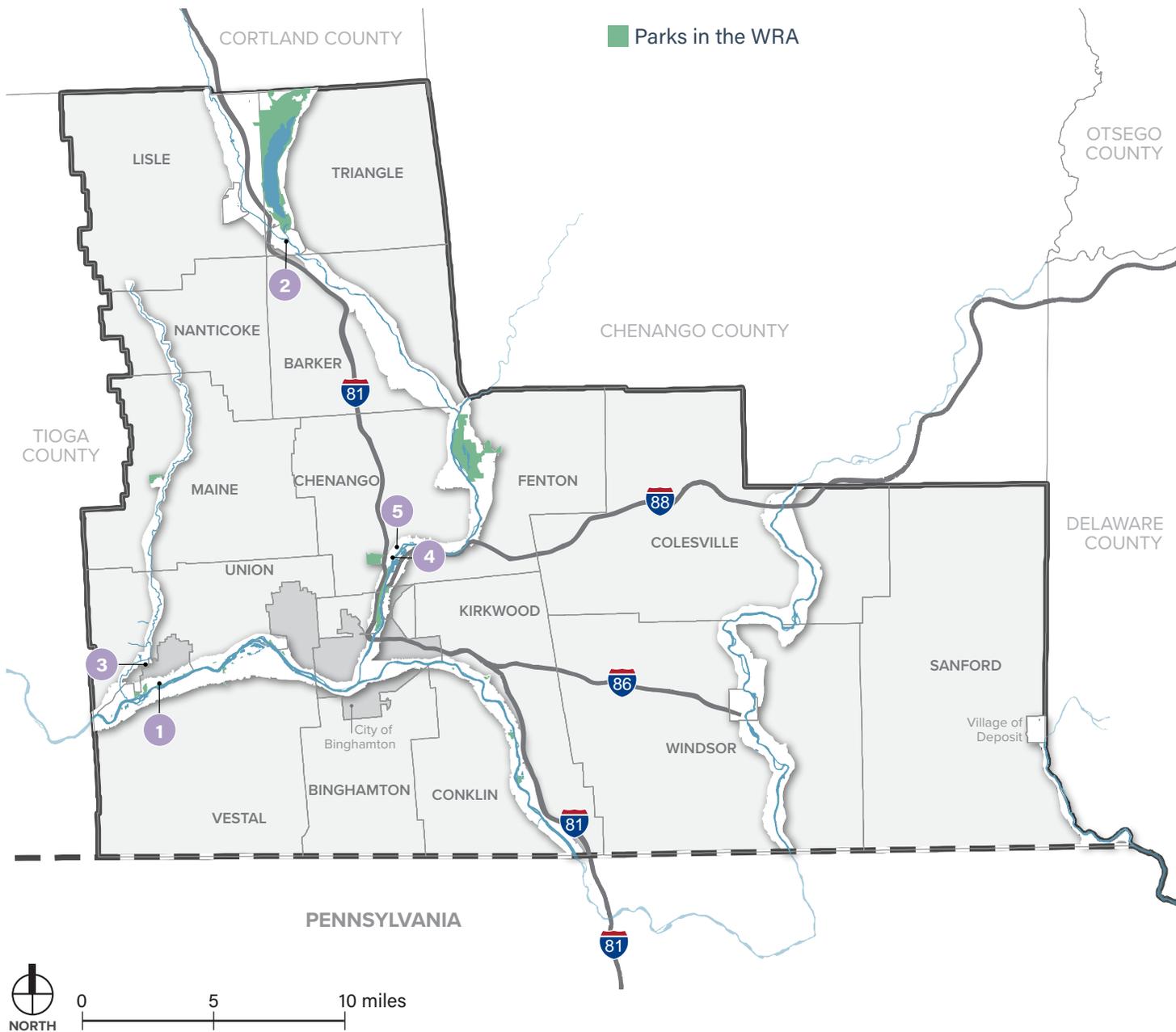
Multi-purpose infrastructure projects focus on layering additional benefits onto new or existing flood control projects. Flooding is a major hazard throughout the WRA, and while flood control infrastructure is important to the safety and well-being of riverfront communities, it is also a significant barrier to public waterfront access. These proposed projects identify opportunities to improve public access to the riverfront while also mitigating flood hazards.

## **PROPOSED PROJECTS**

Three projects are proposed in this section, including:

- **Levee Trails** in Mersereau Park, along Nanticoke Creek, and along the western bank of the Tioughnioga River in the Town of Triangle
- **Castle Creek Improvements** in the Town of Chenango
- **Neighborhood Flood Mitigation** in the Town of Chenango (Broad Acres)

# MULTI-PURPOSE INFRASTRUCTURE



- 1 Mersereau Park
- 2 Tioughnioga River, Whitney Point/Lisle
- 3 Nanticoke Creek, Village of Endicott
- 4 Castle Creek
- 5 Flood Mitigation in the Town of Chenango: Broad Acres

## SECTION 4.2 | PROPOSED PROJECTS

# MULTI-PURPOSE INFRASTRUCTURE



## LEVEE TRAILS

### Location:

Village of Endicott

Town of Union

Town of Triangle

Village of Whitney Point

### Jurisdiction:

Local and State

### Applicable LWRS Policies:

#### Development

Policy 1

#### Flood and Erosion Hazards

Policies 12, 14, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21 and 22

### Estimated Cost:

**Merserau Park:** \$500,000

**Nanticoke:** \$1,400,000

**Tioughnioga:** \$2,500,000

### Timeframe:

**Long-Term, 10-15 years**

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This project examines the feasibility of developing multi-modal trail systems on flood levees and berms in three different locations:

- Merserau Park in the Village of Endicott. This levee trail was identified in the County's 2011 Inter-municipal Waterfront Access Plan. This one-half mile trail would traverse the levee from S. Liberty Ave. to River Street. It is proposed to extend the trail across Vestal Avenue for another 0.15 mi., adding a crosswalk with signage and pedestrian activated signage. Length is approximately 0.5 miles;
- Nanticoke Creek in the Village of Endicott. This would include a multi-modal trail system on levee on the south and east side of Nanticoke Creek between the ballfields near Route 17C and Route 26 in the Village of Endicott; and
- Western bank of the Tioughnioga River. The creation of a new trail along the western bank of the Tioughnioga River would provide a scenic connection for cyclists and pedestrians between the Villages of Whitney Point and Lisle and would also enhance existing trail networks associated with Whitney Point Reservoir. The Tioughnioga levee trail was also identified in the County's 2011 Intermunicipal Waterfront Access Plan. This would include a multi-modal trail system on levees and berms that would provide a western bank scenic connection for cyclists and pedestrians (Whitney Point to Lisle). Length is approximately 2.6 miles.

### BENEFITS

This proposed project is expected to provide the following benefits:

- Increased multi-modal access and safety; and
- Improved public access along the riverfront.

### REGULATORY REQUIREMENTS

Per NYSDEC, any trail proposal within NYS flood control lands will require an Article 16 flood control land use permit. Trail easements or land acquisition will also be required as flood control permanent easements do not provide rights for public access. A permit may also be required from NYSDOT for installing a crosswalk and attendant signage on Vestal Avenue for the Mercerau Park section.



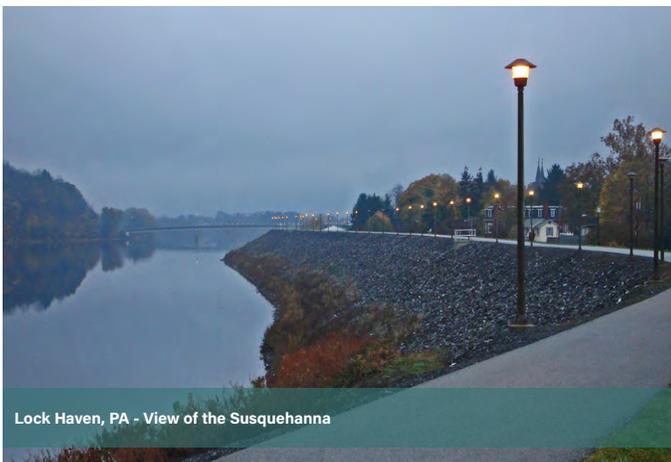
EXISTING CONDITION - MERSEREAU PARK



Lock Haven, PA - View of the Susquehanna



EXISTING CONDITION - NANTICOKE CREEK



Lock Haven, PA - View of the Susquehanna



EXISTING CONDITION - TIOUGHNIOGA RIVER

**Existing Site Conditions** Photo Credits: EagleView; **Example of Multi-Use Trail on Levee** Photo Credits: pawilds.com (middle left); **Example of Multi-Use Trail on Levee** Photo Credits: citydata.com (bottom left)

## SECTION 4.2 | PROPOSED PROJECTS

# MULTI-PURPOSE INFRASTRUCTURE



## CASTLE CREEK CROSSING + FLOOD MITIGATION

### Location:

Town of Chenango

### Jurisdiction:

Local and State

### Applicable LWRS Policies:

#### Development

Policy 1

#### Flood and Erosion Hazards

Policies 11, 12, 14, 15, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21, 21a, and 22

#### Water and Air Resources

Policy 35

### Estimated Cost:

**Pedestrian Bridge:** \$1.5 million

**Dredging and Realignment:** \$2 million

### Timeframe:

Long-Term, 10-15 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This project focuses on addressing the ongoing accumulation of sediment at the confluence of Castle Creek and the Chenango River to proactively mitigate flood risks, as well as identify a feasible crossing over Castle Creek to support the development of the Chenango River Trail. The crossing of Castle Creek would likely be achieved via a bridge spanning 75 feet. The bridge is a critical component of the proposed Chenango River Trail, connecting Otsiningo Park North to residential areas and Chenango Bridge Park to the norther. The following improvements are recommended:

- Address ongoing accumulation of sediment at the confluence of Castle Creek and the Chenango River;
- Design and construct a new pedestrian bridge over Castle Creek; and
- Consider realigning Castle Creek and the Chenango River into their historic alignments, with appropriate stone lining of their re-established banks to keep them in place during flood events. The Broome County Watershed Flood Hazard Mitigation Plan recommends an earthen berm, a pumping station, and excavation of some of the materials in the river islands to help alleviate flooding.

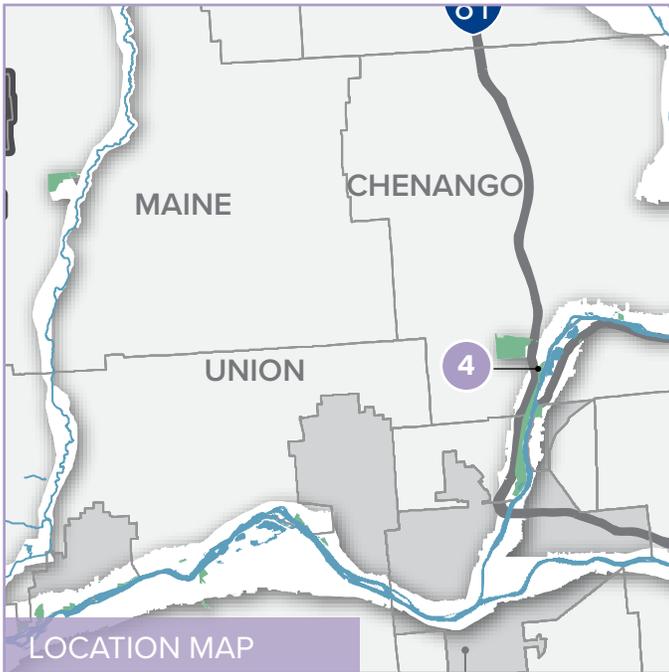
### BENEFITS

This proposed project is expected to provide the following benefits:

- Improved flood mitigation and shoreline restoration, and
- Increased regional multi-modal connectivity.

### REGULATORY REQUIREMENTS

Design and construction would be required to follow the SEQR process and obtain any local permits and approvals. As the Chenango River is a navigable waterway, permits would be required from NYSDEC and the Army Corps of Engineers (ACOE).



Existing Site Conditions Photo Credits: EagleView

## SECTION 4.2 | PROPOSED PROJECTS

# MULTI-PURPOSE INFRASTRUCTURE



## FLOOD MITIGATION IN BROAD ACRES

### Location:

Town of Chenango

### Jurisdiction:

Local, State, and Federal

### Applicable LWRS Policies:

#### Development

Policy 1

#### Flood and Erosion Hazards

Policies 11, 12, 14, 15, and 17

#### Public Access

Policies 19, 19a, and 20

#### Recreation

Policies 21, 21a, and 22

### Estimated Cost:

\$1,500,000

### Timeframe:

Long-Term, 10-15 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

#### Federal

- Infrastructure Investment & Jobs Act

### PROJECT DESCRIPTION

This project focuses on identifying infrastructure improvements to mitigate flooding in a residential neighborhood. The neighborhood is bounded by Quinn Road to the south, Front Street to the west, Matthews Road to the north, and the Chenango River to the east. The Town has purchased some properties in the adjacent neighborhood and may purchase other abandoned homes. To mitigate current flood and ensure future property and assets are not placed at risk, the following actions are recommended:

- Support the Town's rezoning of the adjacent neighborhood from residential to commercial, requiring future buildings to front on Front Street, rear-loaded parking areas that can flood, and flood resilient construction methods (e.g., floodproofing, elevated structures);
- Construct two earthen berms and three pumping stations in this neighborhood for flood mitigation;
- Remove vacant structures, regrade and prepare the land to be flooded; and,
- Construct a floodable, multi-use path along the river in order to advance and connect the Chenango River Trail.

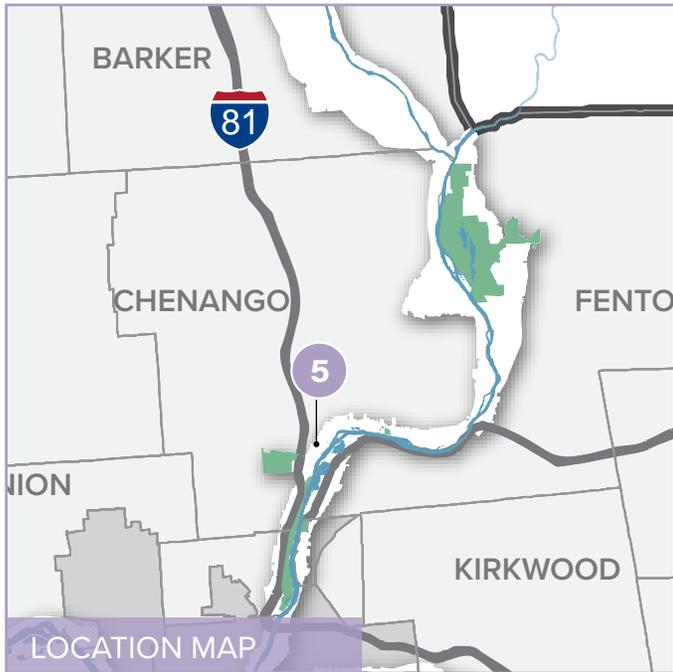
### BENEFITS

This proposed project is expected to provide the following benefits:

- Improved flood mitigation and resiliency;
- Enhanced quality of life for residents in flood-prone areas;
- Expanded regional multi-modal connectivity; and,
- Updated zoning regulations to reduce flood risk.

### REGULATORY REQUIREMENTS

Design and construction would be required to follow the SEQR process and obtain any local permits and approvals. As the Chenango River is a navigable waterway, permits would be required from NYSDEC, the Army Corps of Engineers (ACOE), and potentially the Coast Guard.



Existing Site Conditions Photo Credits: EagleView



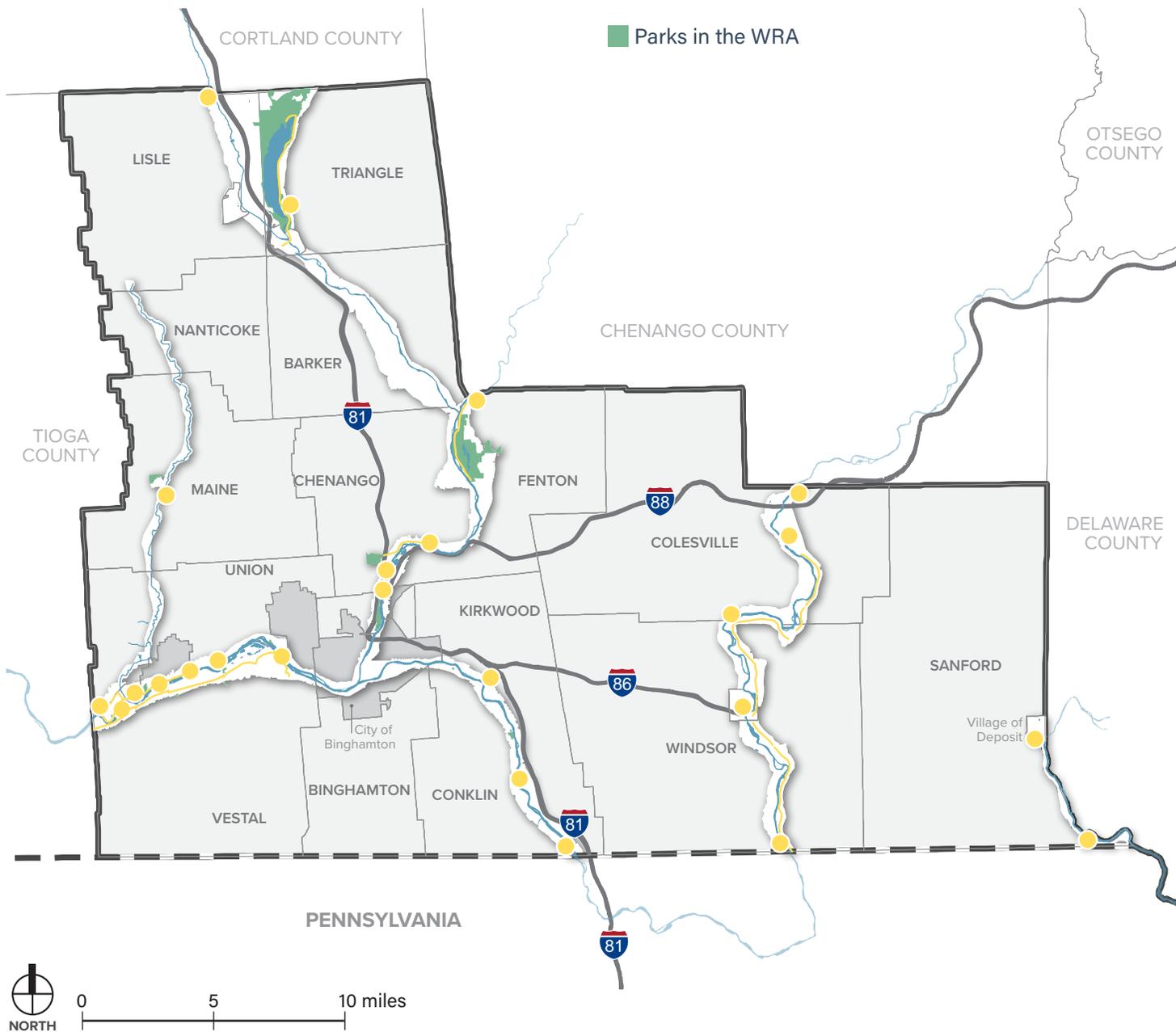
# PROPOSED PROJECTS: **WAYFINDING**

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## **OVERVIEW**

This proposed project focuses on creating a cohesive and coordinated wayfinding signage system for the entire WRA. This project builds upon and expands the existing Two Rivers Greenway signage system and introduces several sign types to improve wayfinding for a range of different modes of transportation and users -- from motorists to pedestrians to paddlers.

WAYFINDING



- Proposed park projects where wayfinding signage is recommended
- Proposed trail projects where wayfinding signage is recommended

## SECTION 4.2 | PROPOSED PROJECTS

# WAYFINDING



## SIGNAGE

### Location:

Countywide

### Jurisdiction:

Varies

### Applicable LWRs Policies:

#### Development

Policy 1

#### Public Access

Policies 19 and 19a

#### Recreation

Policies 21 and 21a

#### Historic & Scenic Resources

Policies 23 and 25

### Estimated Cost:

Final design and cost will vary depending on type and location:

- Landmark Signage: \$20k-\$50k (per sign)
- Downtown and Village Signage & Wayfinding: \$15k-\$35k (per sign)
- Land-Based Recreational Signage: \$10k-\$50k (per sign)
- Water-Based Recreational Signage: \$15k-\$35k (per sign)

### Timeframe:

Mid-Term, 5-10 years

### Funding:

#### New York State

- Environmental Protection Fund
- Transportation Alternative and Congestion Mitigation & Air Quality Improvement Programs
- Recreational Trails Program

### PROJECT DESCRIPTION

A coordinated wayfinding signage system is proposed throughout the County's WRA to establish consistent visual design standards and enhance wayfinding for all modes of transportation. Wayfinding signage helps to reinforce a place's identity and plays a critical role in helping residents and visitors identify and navigate the county's unique waterfront destinations and services. The following wayfinding improvements are recommended:

- Landmark Signage, including gateway signage for villages and towns and highlighting the County's extensive network of natural resources;
- Downtown and Village Signage, including streetscape banners, pedestrian directional signage, and parking signage to improve wayfinding between downtown centers and the waterfront;
- Land-Based Recreational Signage, including county park gateway signage, park identification and informational signage, and identification markers; and,
- Water-Based Recreational Signage, including regulatory signage, informational signage, and mile markers.

### BENEFITS

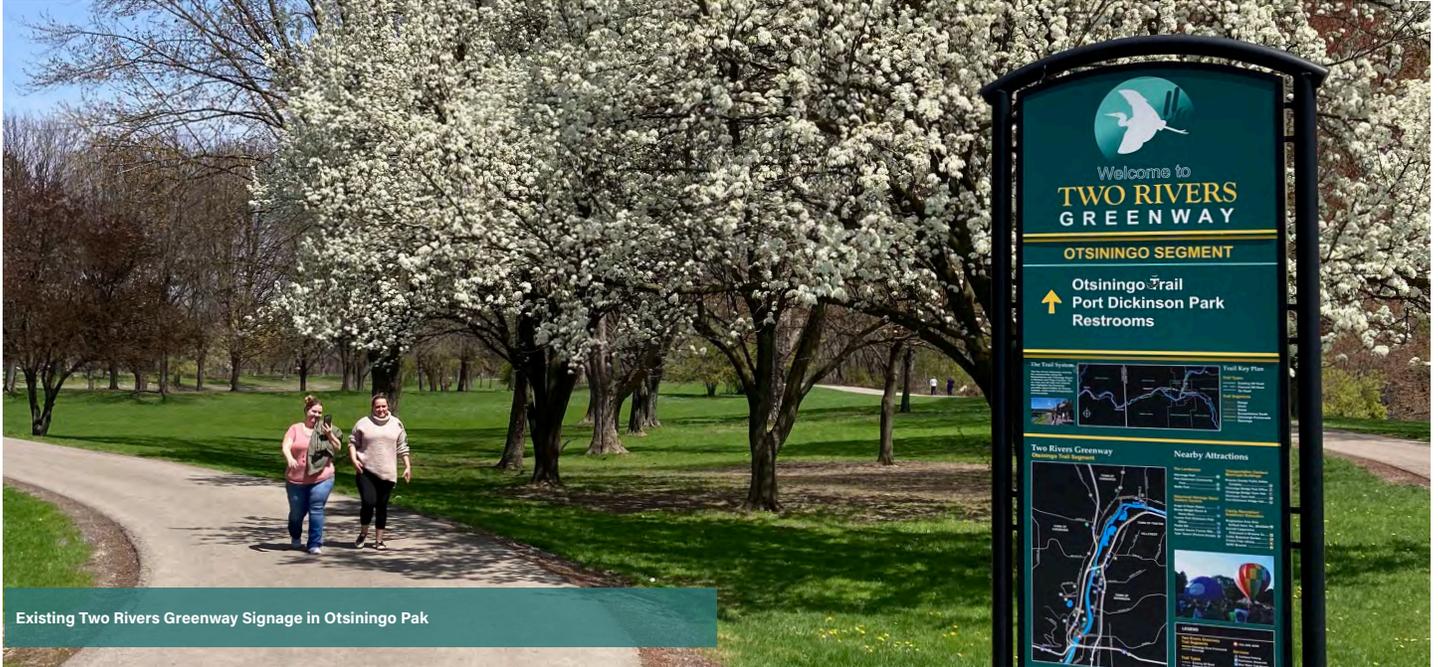
This proposed project is expected to provide the following benefits:

- Enhanced walkability and pedestrian experience;
- Improved connectivity between downtowns and riverfront destinations;
- Enhanced tourism opportunities; and
- A strengthened sense of place.

### REGULATORY REQUIREMENTS

The following will be required for project implementation:

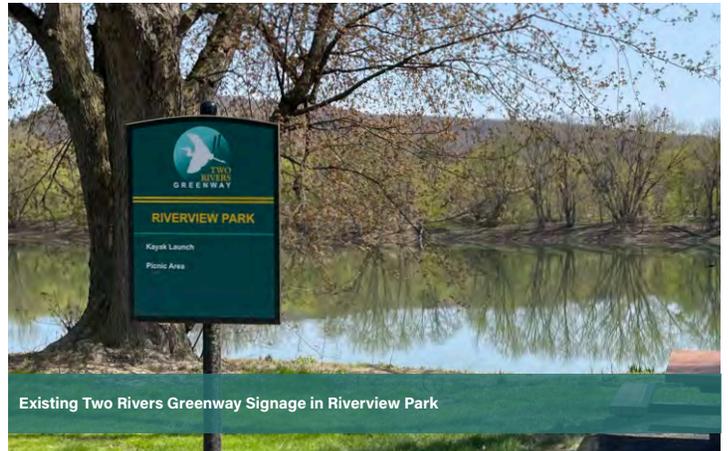
- Local approvals
- NYSDEC
- NYSDOT approvals on State roads/highways



Existing Two Rivers Greenway Signage in Otsiningo Pak



Existing Park Signage in Lisle Village Pool



Existing Two Rivers Greenway Signage in Riverview Park



Existing Regulatory Signage

The wayfinding signage proposed in this LWRS builds upon and expands the Two Rivers Greenway signage system to create a cohesive and legible signage system throughout the WRA and Broome County.

Existing Site Conditions Photo Credits: Bergmann

## SECTION 4.2 | PROPOSED PROJECTS

# WAYFINDING



### Landmark Signage

**A. Major Gateway Signage:** Landmark signage that identifies key entrances to watersheds and village/towns in Broome County and is located along major roadways.

**B. Minor Gateway Signage:** A simplified version of Sign Type A that highlights the extensive natural resources and watersheds network in Broome County. This type of signage can be applied more frequently, as desired, for an enhanced wayfinding experience along minor roadways and trail systems.

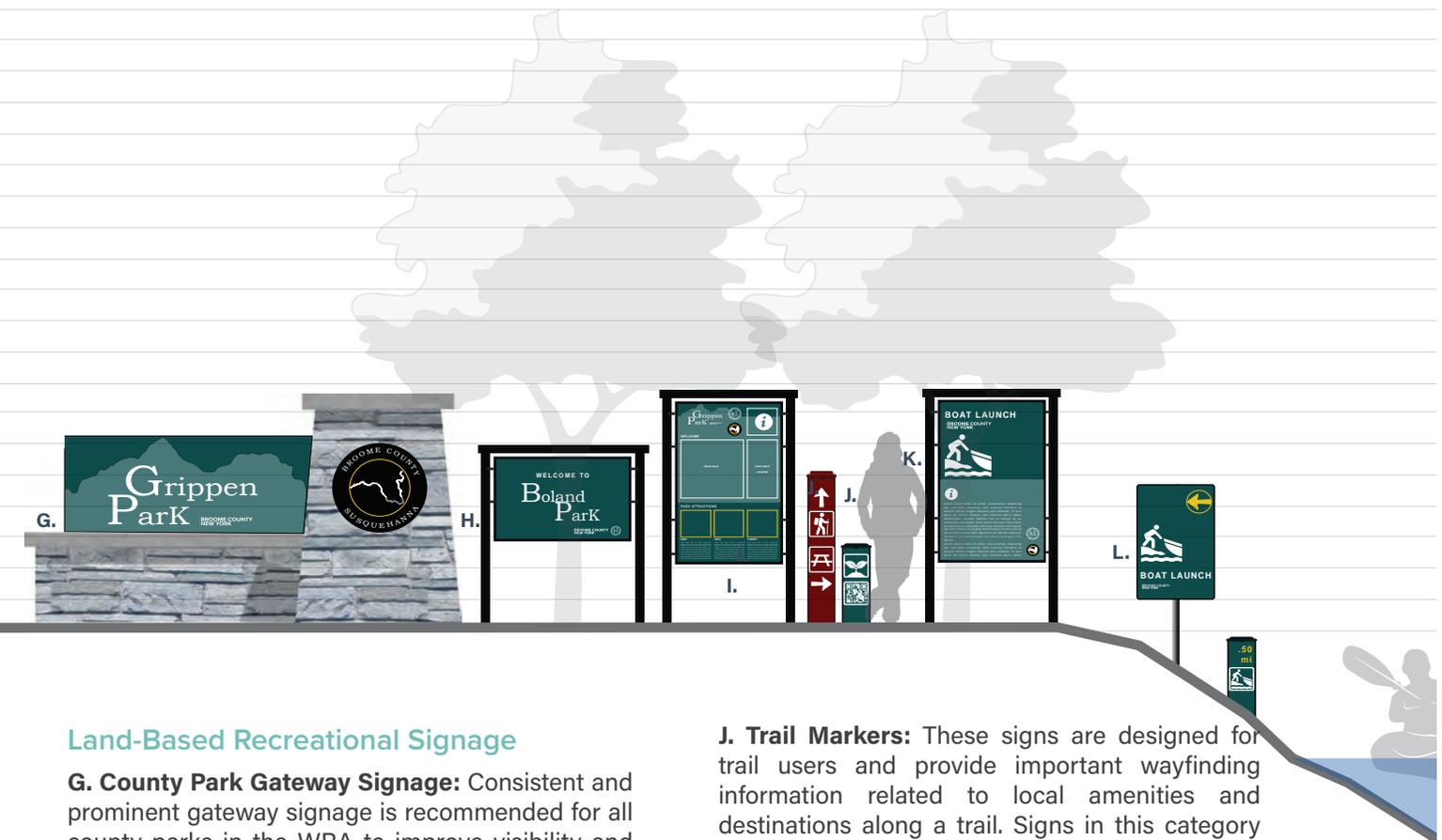
### Downtown and Village Signage & Wayfinding

**C. Streetscape Banner:** Streetscape banners enhance and promote a community's identity and can be used to strengthen the connection between downtown and waterfront areas.

**D. Pedestrian Informational Signage:** Building on the Two Rivers Greenway signage system, this informational sign supports wayfinding for pedestrians and could include information about local destinations, cultural and natural resources, and maps highlighting a variety of recreational, waterfront, and downtown destinations.

**E. Pedestrian Directional Signage:** Directional signage designed for pedestrians can provide helpful information regarding the walking time and distance to local destinations.

**F. Parking Directional Signage:** This type of signage direct motorists to public parking areas, and when paired with Sign Type E, can reinforce a walkable downtown and waterfront area.



### Land-Based Recreational Signage

**G. County Park Gateway Signage:** Consistent and prominent gateway signage is recommended for all county parks in the WRA to improve visibility and ensure these parks are viewed by the public as a cohesive system.

**H. Local Identification Signage:** Parks are a source of a community's pride and identity; however, many waterfront parks are not clearly identified along major transportation routes. Park identification signage is recommended for all local waterfront parks to increase visibility and accessibility as well as ensure all waterfront parks are viewed as a coordinated system.

**I. Park Informational Signage:** This sign type helps orient and guide visitors once they have arrived at a park and may include: maps that are park-specific as well as those that highlight the county's extensive waterfront park and trail systems; rules and regulations; and, information about unique cultural or natural resources.

**J. Trail Markers:** These signs are designed for trail users and provide important wayfinding information related to local amenities and destinations along a trail. Signs in this category may also be used as trail mile markers and/or to highlight unique cultural or natural resources. Additional information may be embedded in these smaller signs with the use of QR codes and other digital technology.

### Water-Based Recreational Signage

**K. Boat Launch Identification Signage:** These signs provide important rules and regulations for water-based recreational activities to enhance users' experience and safety. They also feature maps of the County's Blueway system to support recreational navigation of the county's rivers.

**L. Boat Launch Identification and Mile Markers for Paddlers:** These signs are intended to serve water-based recreational boaters, such as paddlers. They notify boaters of boat launch locations and also provide waterway mile markers to support navigation of the county's Blueway system.

# SECTION 4.2 | PROPOSED PROJECTS

## WAYFINDING



TABLE 4.2: PROPOSED SIGNS BASED ON LOCATION

Location Type	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.
Major Waterfront Access Points	●								●		●	●
Minor Waterfront Access Points		●							●		●	●
Trails and Connections	●	●								●		
Downtowns and Villages	●	●	●	●	●	●						
County Parks							●		●	●	●	●
Neighborhood Parks								●	●	●	●	●

### KEY

- A. Major Gateway Signage
- B. Minor Gateway Signage
- C. Streetscape Banner
- D. Pedestrian Informational Signage
- E. Pedestrian Directional Signage
- F. Parking Directional Signage
- G. County Park Gateway Signage
- H. Local Park Gateway Signage
- I. Park Informational Signage
- J. Trail Markers
- K. Boat Launch Identification Signage
- L. Boat Launch Identification and Mile Markers for Paddlers





# PROPOSED PROJECTS: **REDEVELOPMENT**

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## **OVERVIEW**

Redevelopment projects focus on increasing local access to renewable energy generation. These projects include solar developments on industrial lands that are currently underutilized in the County's WRA.

## **PROPOSED PROJECTS**

Two renewable energy projects are proposed in this section, including the:

- **Endicott Solar Farm** in the Village of Endicott
- **Goudy Station** in the Village of Johnson City

REDEVELOPMENT: **RENEWABLE ENERGY**



- 1 Endicott Solar Farm
- 2 Goudy Station

## SECTION 4.2 | PROPOSED PROJECTS

# REDEVELOPMENT



## RENEWABLE ENERGY

### Location:

Village of Endicott  
Village of Johnson City

### Jurisdiction:

Local

### Applicable LWRs Policies:

Development

Policy 1

Flooding and Erosion Hazards

Policies 11, 12,

Energy and Ice Management

Policy 27

Water and Air Resources

Policy 33

### Timeframe:

Mid-Term, 5-10 years

### Funding:

New York State

- NYS Energy Research & Development Authority (NYSERDA) programs

### PROJECT DESCRIPTION

Redevelopment projects focus on generating feasible sources of renewable energy in the County. This project includes the redevelopment of two sites into solar farms:

- Municipally-owned lands at the wastewater treatment plant and airport; and
- The former Goudy Steam Station north of Boland Park in the Village of Johnson City.

The proposed site at the wastewater treatment plant is a capped landfill situated between the sewage treatment plant and the airport (Dead Creek). The landfill is monitored by personnel at the treatment plant under the auspices of the NYSDEC. It covers an area of approximately 4.9 acres. An adjoining area between the runway, landfill and Susquehanna River is another 42 acres. This area would be potentially available for further development.

The proposed site at the former Goudy Steam Station is located just north of Boland Park. This former coal-fired electricity plant was recently acquired by a developer and is slated for demolition to make way for renewable energy generation, including solar and potentially hydroelectric and geothermal.

### BENEFITS

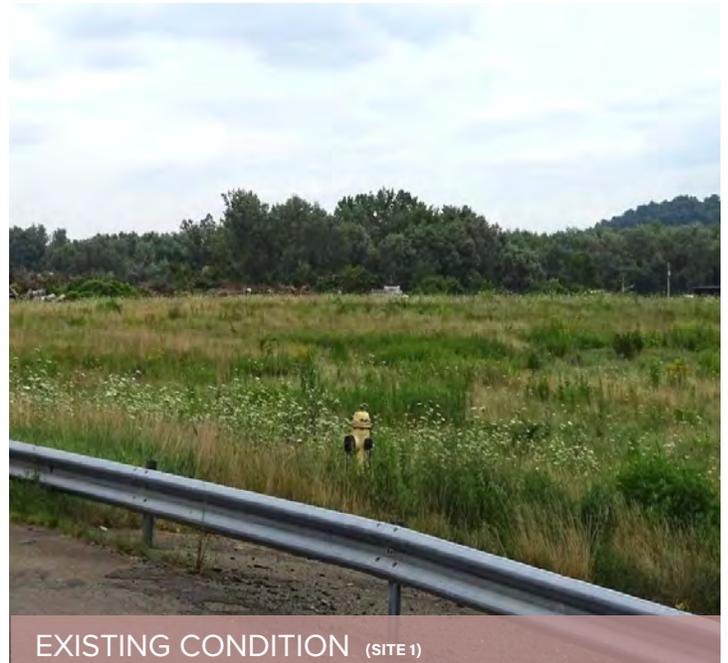
This proposed project is expected to provide the following benefits:

- Generation of renewable energy sources (an estimated 1,750MW per year at the Village of Endicott site);
- Reduction in greenhouse gases; and
- Increased community access to renewable energy sources.

### REGULATORY REQUIREMENTS

The following will be required for project implementation:

- Local approvals
- State Environmental Quality Review (SEQR)
- Stormwater Permit for Construction Activity
- Interconnection agreements with electric utilities



Existing Condition Photo Credit: Prudent Engineering; Representative Imagery Photo Credit: Unknown (middle right), Livingston County News (bottom right); Images used here for representative purposes only.



# PROPOSED PROJECTS: **RESOURCE PRESERVATION**

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## **OVERVIEW**

The proposed projects contained in this section focus on preserving and highlighting the indigenous, cultural, historic, and natural resources that have shaped the County's waterfront overtime. These projects range from capital projects to rehabilitate historic structures listed on the National Register to artful interpretive displays that engage visitors and uncover the area's unique history.

## **PROPOSED PROJECTS**

**Interpretive displays** are proposed throughout the WRA. Two additional site-specific projects are proposed in this section, including:

- **Lock 107 Restoration** in the Town of Fenton
- **Ouaquaga Bridge Interpretation** in the Towns of Colesville and Windsor

RESOURCE PRESERVATION



- 1 Lock 107 Restoration
- 2 Ouaquaga Bridge Interpretation

## SECTION 4.2 | PROPOSED PROJECTS

# RESOURCE PRESERVATION



## LOCK 107 RESTORATION

### Location:

65 River Road  
Fenton, NY 13746

### Jurisdiction:

New York State

### Applicable LWRS Policies:

**Development**  
Policy 1

**Public Access**  
Policy 19

**Historic and Scenic Resources**  
Policy 23

### Timeframe:

Mid-Term, 5-10 years

### Potential Funding:

New York State

- Environmental Protection Fund

### PROJECT DESCRIPTION

Resource preservation proposed at Lock 107 of the Chenango Canal includes the stabilization of the canal structure remnants that are listed on the National and State Registers of Historic Places and the development of an interpretive destination that connects to Chenango Valley State Park.

State-owned land along the former canal tow path, provides an opportunity to showcase the significance of this historic canal. Although most of the structures are hidden by vegetative growth, proper clearing and resource preservation could help reveal the story of the area. With potential trail access to Chenango Valley State Park to the south, the site could serve as an important trailhead to a larger trail network and could connect to parking and other amenities within the park. In addition, as described in the 2007 Reconnaissance Survey of the Historic Chenango Canal recommendations, the natural setting of Lock 107 contributes to the interpretive experience of this 19th century transportation system. Site improvements may include an interpretive display that features the canal history and function, seating areas and overlooks along the canal prism and Chenango River, hard and softscape site furnishings and improved entrance and wayfinding signage on site and at River Road entrances. The stabilization and interpretation of Lock 107 was identified as medium priority project in the Broome County Intermunicipal Waterfront Public Access Plan.

### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- Preserves an authentic representation the Susquehanna Heritage Area's harnessing nature interpretive theme.
- Improves pedestrian circulation along the Chenango River and connects to the Chenango Valley State Park.
- Expands the potential for heritage and recreation tourism and its associated economic impact.
- Serves as an educational outdoor attraction that supports active healthy communities.

### REGULATORY REQUIREMENTS

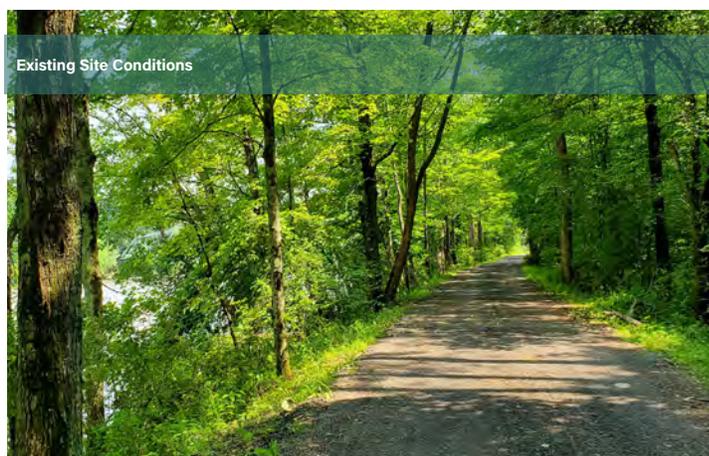
The proposed project will require local approvals and building permits from the Town of Fenton. A registered historic property, the project will require approvals from the State Historic Preservation Office (SHPO).



Existing Site Conditions



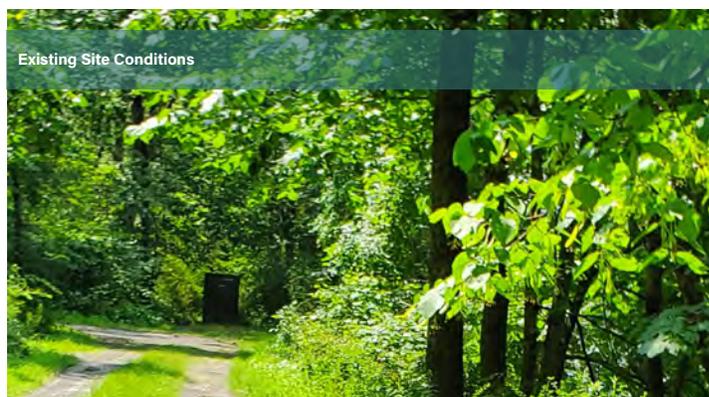
Example of a Rural Overlook Viewing an Engineering Marvel



Existing Site Conditions



Example of an Interpretive Trail Feature Area



Existing Site Conditions

**Kinzua Bridge in McKean County, PA** (top left) Photo Credit: Creative Commons Image Courtesy of Michael Knight on flickr.com; **Saint Croix Island International Historic Site Interpretive Trail** (bottom left) Photo Credit: NPS; **River Road Clearing at Lock 107** (top right); **River Road Approaching NYS Route 79 Bridge** (center right); **River Road Approaching Chenango Valley State Park** (bottom right). Existing Site Conditions Photo Credits: Sustainable Planning Design, LLC.

## SECTION 4.2 | PROPOSED PROJECTS

# RESOURCE PRESERVATION



## INTERPRETIVE DISPLAYS

### Location:

Countywide

### Jurisdiction:

Varies

### Applicable LWRS Policies:

Historic and Scenic Resource Policies  
23 and 25

### Timeframe:

Short-Term, less than 5 years

### Potential Funding:

New York State

- Environmental Protection Fund

### PROJECT DESCRIPTION

Part of the New York State designated Susquehanna Heritage Area, the Broome County WRA has a variety of cultural, historic and natural resources that comprise the unique character of the area. The proposed interpretive display project will enhance these resources by preparing an area-wide approach to the development of interpretive displays.

Resources that have the potential for interpretation are spread throughout the Broome County WRA. Developing a collection of cohesive experiences could expand the educational impact of interpretation efforts and bolster the significance of preserving the various heritage resources. This approach would align each interpretive feature with one of three interpretive themes of the Susquehanna Heritage Area Management Plan. Management Plan interpretive themes include: the Natural Resources and Harnessing Nature Interpretive Theme; Native Americans in the Upper Susquehanna Interpretive Theme; and Valley of Opportunity Interpretive Theme. Interpretive displays would utilize branding and marketing established for the Heritage Area, capitalizing on existing tourism development efforts. This project is consistent with those identified in the Broome County Intermunicipal Waterfront Public Access Plan.

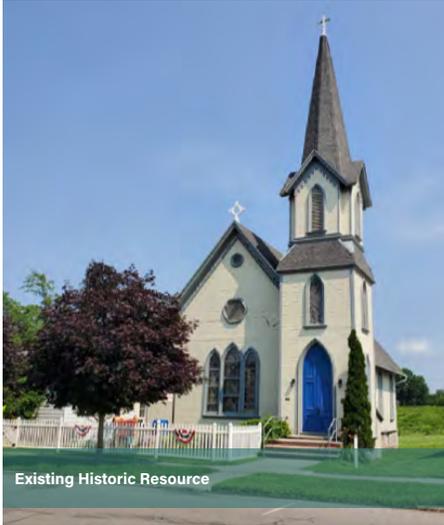
### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- Preserves the authentic narrative of the region through interpretive historic, cultural and natural resources displays.
- Enhances the potential for heritage tourism and its associated economic impact by showcasing and marketing collections of heritage resources as a unique local experiences.
- Serves as an educational opportunity for residents and visitors to learn about the region's people, places, features and events.

### REGULATORY REQUIREMENTS

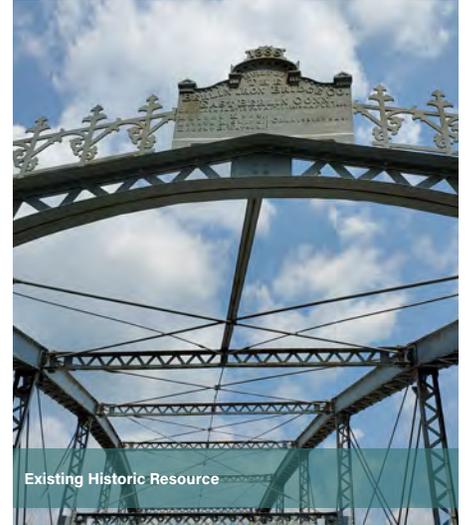
The proposed project will require approvals from the respective jurisdictions for interpretive display improvements and coordination with the Susquehanna Heritage Area for consistency with the Management Plan.



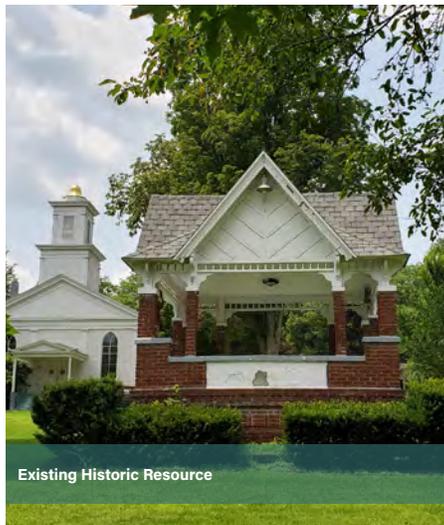
Existing Historic Resource



Existing Historic Resource



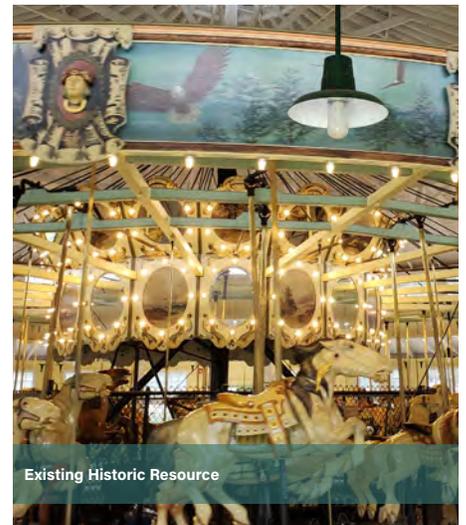
Existing Historic Resource



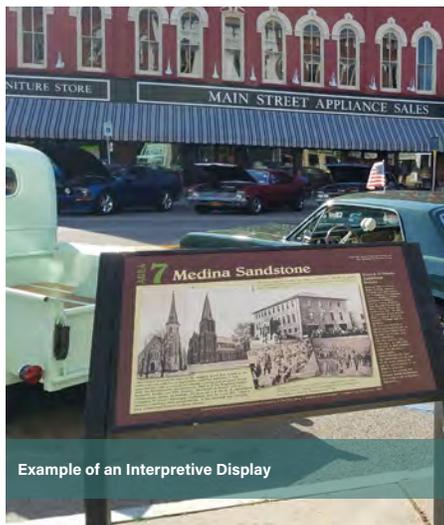
Existing Historic Resource



Existing Historic Resource



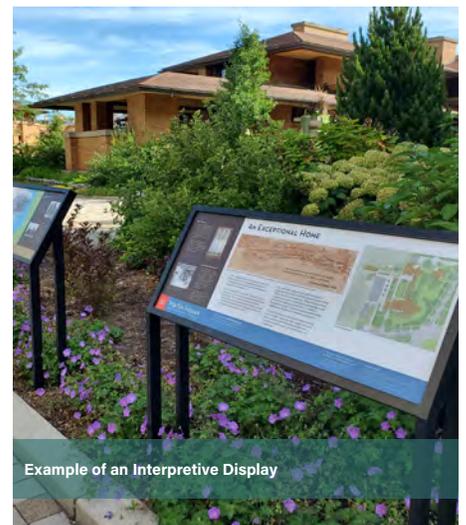
Existing Historic Resource



Example of an Interpretive Display



Example of an Interpretive Display



Example of an Interpretive Display

Grace Episcopal Church in Whitney Point, NY (top left); Cyrus Gates Farmstead in Maine, NY (top center); Ouaquaga Bridge (top right); Village Green in Windsor, NY (center left); Jedediah Hotchkiss House (center center); C. Fred Johnson Park Carousel (center right); Downtown Medina, NY (bottom left); Delaware Park in Buffalo, NY (bottom center); Darwin Martin House in Buffalo, NY (bottom left). Photo Credits: Sustainable Planning Design, LLC.



## OUAQUAGA BRIDGE INTERPRETATION

**Location:**

324 Doolittle Road  
Colesville, NY 13826

**Jurisdiction:**

New York State

**Applicable LWRP Policies:**

**Development**  
Policy 1

**Public Access**  
Policy 19

**Historic & Scenic Resources**  
Policies 23 and 25

**Timeframe:**

Mid-Term, 5-10 years

**Potential Funding:**

New York State

- Environmental Protection Fund

### PROJECT DESCRIPTION

The proposed Ouaquaga Bridge project will develop an interpretive destination adjacent to the existing pedestrian bridge to recognize the significance of this structure as well as the Haudenosaunee settlement that was located nearby.

Currently functioning as a DEC Boat Access site, the project would expand on existing site features including the Ouaquaga Bridge, which is listed on the National and State Registers of Historic Places. The historic bridge could serve as a beacon for learning about the significance of the Onaquaga Settlement that was located within the area, but was destroyed during the American Revolution. In addition, with safe pedestrian access across the Susquehanna River, the site has the potential to be a trailhead for the proposed rail trail along the former rail line that generally follows the east side of the river and has the opportunity to extend as far as the D&H Rail-Trail in Pennsylvania. Proposed site improvements include the development of an interpretive center that provides educational information about the historic Onaquaga Settlement (potentially with indoor and/or outdoor displays and gathering areas based on development feasibility), seating and picnic areas, hard and softscape furnishings and improved entrance and wayfinding signage. The Ouaquaga Bridge interpretation site was identified as a medium priority project in the Broome County Intermunicipal Waterfront Public Access Plan.

### BENEFITS

The proposed project would provide the following benefits for the Broome County WRA:

- Recognizes the significance of the Haudenosaunee settlement.
- Serves as an educational and recreational waterfront destination for residents and visitors.
- Expands an existing resource with pedestrian access along and across the Susquehanna River.
- Provides gathering space for outdoor activity that features educational and recreational opportunities.

### REGULATORY REQUIREMENTS

The proposed project will require local approvals and building permits from the Town of Colesville. As a New York State Department of Environmental Conservation (DEC) boat access site, DEC approval for improvements will be required.



LOCATION MAP



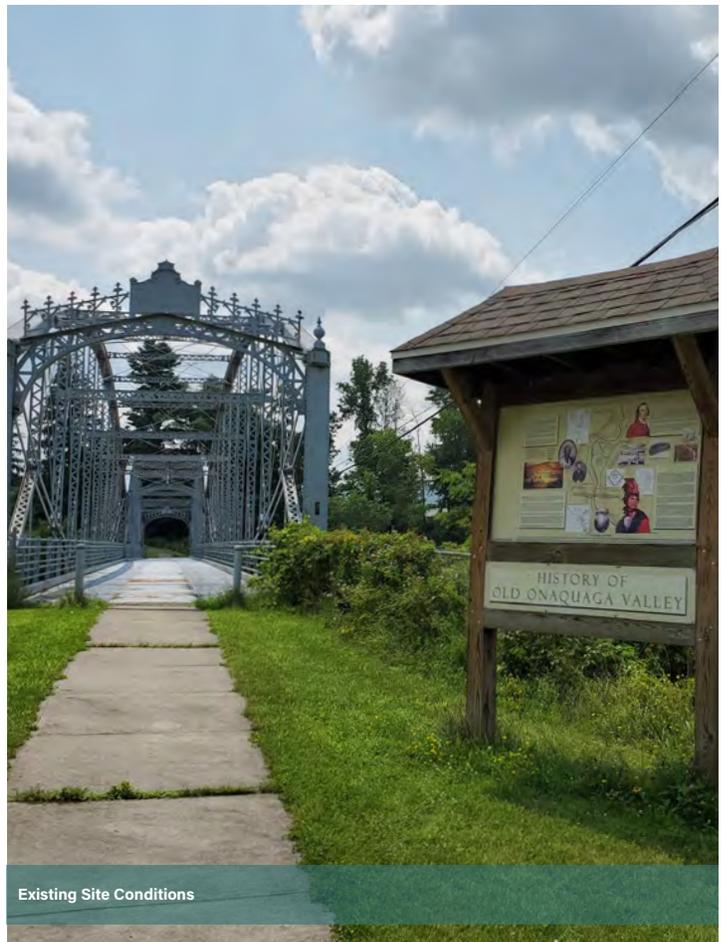
Existing Site Conditions



Example of an Outdoor Pavilion



Example of an Indoor Pavilion



Existing Site Conditions

Island View Park Pavilion in Waddington, NY (top left); Eleanor and Wilson Greatbatch Pavilion at the Darwin Martin House in Buffalo, NY (bottom left); DEC Boat Launch Site (top right); Onaquaga Bridge and Existing Onaquaga Valley Interpretive Sign (bottom right) Photo credits: Sustainable Planning Design, LLC.





## SECTION 5

# TECHNIQUES FOR LOCAL IMPLEMENTATION

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This section identifies general land use guidance that should be considered by local municipalities as they individually advance their efforts to prepare and finalize municipal Local Waterfront Revitalization Strategies. This section does not include individual assessments of regulatory updates required by each community, recognizing that level of analysis will occur in conjunction with the development of municipal LWRS documents. The existing regulatory framework in place in each community is summarized in Section II of this LWRS document.

## SECTION 5.1

# LOCAL LAWS AND REGULATIONS NECESSARY TO IMPLEMENT THE LWRS

The following narrative provides a framework for municipalities to consider as they advance through the individual LWRS process.

### LOCAL LAWS AND REGULATIONS NECESSARY TO IMPLEMENT THE LWRS

Typically, the following local laws and regulations are necessary to successfully implement LWRS policies and projects as outlined in the LWRS. Individual municipalities should review their regulatory structure for compliance and ensure the basic regulatory framework is in place to successfully administer and monitor any locally-adopted LWRS's in the future.

#### Zoning

Zoning codes serve as a legal framework for facilitating appropriate and responsible use of property, typically regulating the types of uses appropriate on properties; the location, height, and size of buildings; site layout and design; and enforcement procedures. Municipalities should ensure their zoning codes permit the uses proposed within the LWRS. Some communities within Broome County do not currently have zoning regulations to guide development and should consider implementing zoning regulations to ensure compliance with the LWRS.

#### Subdivision Regulations

Subdivision regulations typically control the division of land with design standards and procedures. Not all municipalities in the County have subdivision regulations. Where they do exist, they should be reviewed to ensure they are not in conflict with projects or policies identified within the LWRS.

#### Stormwater Management and/or Erosion & Sediment Control

Land development activities can have a negative impact on stormwater runoff. As impervious ground cover increases, the flow and drainage of stormwater runoff is altered and can cause damage and erosion from flooding and increase the spread of water-borne pollutants. Clearing and grading of land during construction can also increase soil erosion and contribute to the loss of vegetation. Existing ordinances within individual communities should be reviewed as municipalities advance through the LWRS process to ensure minimum stormwater management requirements are in place and to ensure protection of the general health, safety and welfare of the residents of the County. Land development activities occurring throughout Broome County must follow requirements of the NYS Department of Environmental Conservation State Pollution Discharge Elimination System (SPDES) General Permit for construction activities.

#### Floodplain Protection

Flooding has been a consistent concern throughout the WRA in Broome County, with major flood events occurring multiple times in recent history. Municipalities should ensure ordinances are in place that regulate uses that may pose a danger to the health, safety, and property of County residents and land owners due to erosion hazards. Strict regulations should be in place to control uses that may be vulnerable to flooding. Additional information on existing flood zones is included in Section II of this LWRS.

## Historic Preservation

Portions on the LWRS lie within the Susquehanna Heritage Area as well as local historic districts and individually recognized historic properties. Municipalities are encouraged to ensure the preservation of historic resources through the creation and adoption of local laws that focus on the protection and enhancement of irreplaceable historic resources within the WRA.

## State Environmental Quality Review Act (SEQRA)

The State Environmental Quality Review Act (SEQRA) requires all state and local government agencies to weigh environmental impacts with economic and social factors during discretionary decision-making. The SEQR process analyzes any potential environmental impact related to a proposed development or action, including proposed projects as outlined in Section IV of the LWRS. The New York State Department of Environmental Conservation has authority to enforce SEQR laws.

## Local Waterfront Revitalization Strategy Consistency Review Law

A template LWRS Consistency Review Law is provided in the Appendix of this document, which can be used by municipalities as they advance individual LWRS documents. The purpose of the Consistency Review Law is to ensure future proposed actions located within municipal WRAs within Broome County align with the policies and provisions of the locally-prepared Local Waterfront Revitalization Strategy.

## Waterfront Assessment Form (WAF)

Each individual community should develop a Waterfront Assessment Form, which will serve as a tool to determine whether a proposed action is consistent with the policy standards outlined in future locally-adopted LWRSs. The form would be used by the designated reviewing board or agency when considering new projects within a designated WRA, as defined within the Consistency Review Law document.

## CLIMATE SMART COMMUNITIES

Climate Smart Communities (CSC) is a New York State program designed to support municipal efforts to meet economic, social, and environmental challenges posed by climate change. Counties, cities, towns, and villages can voluntarily join the program by adopting the CSC Pledge to become a Registered Community. Certified Communities have not only taken the CSC Pledge, but have completed and documented actions that can earn points. There are 12 pledge elements and over 100 actions that municipalities can take to reduce greenhouse gas emissions and adapt to a changing climate. Many actions are fundable under the certification category of the CSC Grant Program. Certification levels include bronze, silver, and gold. The levels provide a means to recognize those communities that achieve success under their CSC Pledge, track and reward local actions, and provide a clear framework for local climate action.

New York State currently has more than 285 Registered Communities and 34 Certified Communities. Broome County is a bronze certified Climate Smart Community, with 178 points earned from 37 completed actions. The LWRS may provide opportunities for Broome County to earn additional points towards CSC certification.

## SECTION 5.2

# OTHER PUBLIC AND PRIVATE ACTIONS NECESSARY TO IMPLEMENT THE LWRS

As individual municipalities advance their LWRS, they should consider other planned developments, waterfront investments and planning documents to determine how it relates to the advancement of the LWRS. Sample projects that should be reviewed, considered and incorporated, as applicable, may include but are not limited to:

- Comprehensive Plans
- Park and Trails Plans and Projects
- Downtown or Area-Wide Master Plans
- Major development projects (public and private)
- Major transportation projects

In addition, the following state and federal actions and programs must be considered as part of the LWRS process.

### STATE ACTIONS AND PROGRAMS

#### Department of State

- Technical assistance for LWRS implementation of various planning, design and construction projects proposed within the WRA.
- Funding assistance through the Environmental Protection Fund for the implementation of proposed projects (as described in Section IV of the LWRS).

#### Department of Environmental Conservation

- Funding assistance with planning studies and/or design and construction of projects targeted to control any steep slope erosion in the waterfront area.
- Implementation and administration of Article 24 of the State's Environmental Conservation Law for regulated wetland areas.
- Technical assistance, review, and approval of public access improvements within the WRA.

#### Division of Homes and Community Renewal

- Funding and technical assistance with revitalization efforts within the WRA.

#### NYS Energy Research and Development Authority

- Funding and technical assistance with revitalization efforts within the WRA.

#### NYS Department of Transportation

- Implement improvements to improve access and circulation for pedestrians and bicyclists.
- Incorporate traffic calming improvements within the WRA.

#### Office of Parks, Recreation, and Historic Preservation

- Funding approval under programs such as the Land and Water Conservation Fund and the Clean Water / Environmental Protection Fund.

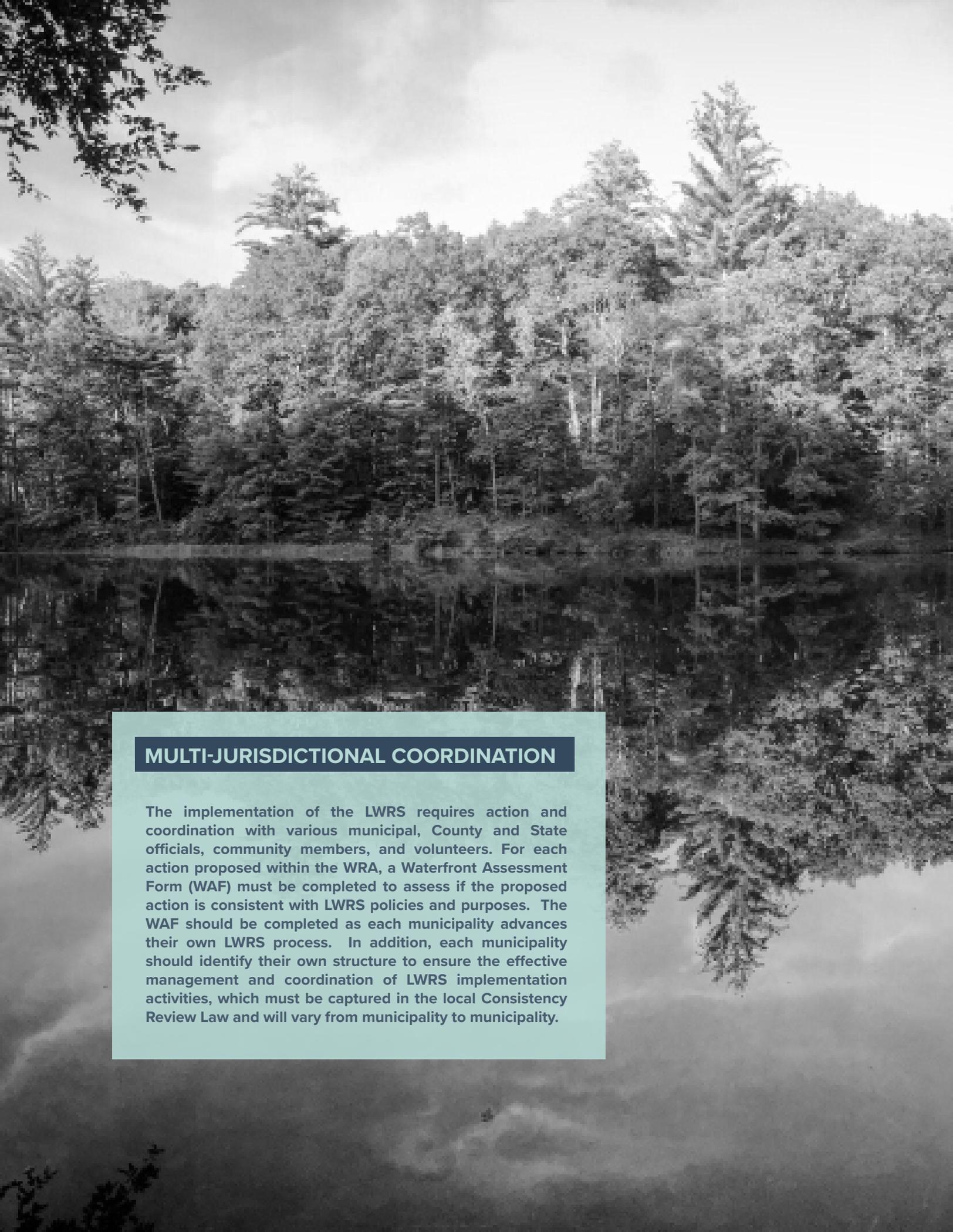
### FEDERAL ACTIONS AND PROGRAMS

#### Department of Commerce

- Funding assistance and/or technical assistance for economic development projects.

#### Department of Housing and Urban Development

- Funding assistance for community projects through the Community Develop Block Grants program.



## MULTI-JURISDICTIONAL COORDINATION

The implementation of the LWRS requires action and coordination with various municipal, County and State officials, community members, and volunteers. For each action proposed within the WRA, a Waterfront Assessment Form (WAF) must be completed to assess if the proposed action is consistent with LWRS policies and purposes. The WAF should be completed as each municipality advances their own LWRS process. In addition, each municipality should identify their own structure to ensure the effective management and coordination of LWRS implementation activities, which must be captured in the local Consistency Review Law and will vary from municipality to municipality.

## SECTION 5.3

# FINANCIAL RESOURCES NECESSARY TO IMPLEMENT THE LWRS

**Implementing the LWRS and proposed projects requires financial resources. Implementation and management of the Broome County LWRS and individual municipal LWRS's will require administrative costs, costs associated with local review and management, capital improvement expenditures, and ongoing maintenance and upkeep of completed projects. A brief overview of available funding sources and programs is below.**

### LOCAL FUNDING SOURCES

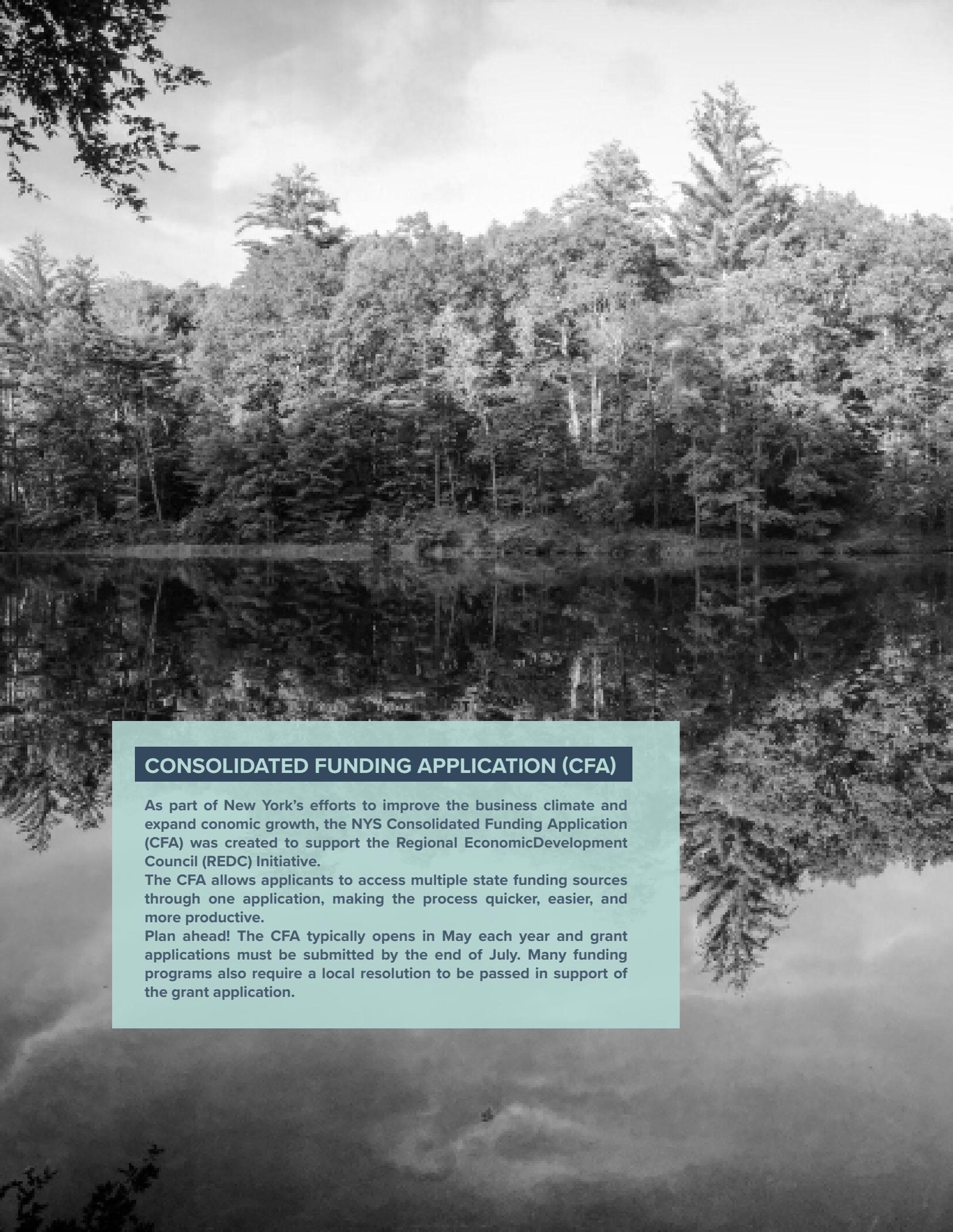
- Local Administrative Costs: Costs associated with the day-to-day administration of the LWRS should be included in municipal budgets as a separate line item. Any allocated costs should cover consistency reviews of any proposed actions and developments, with coordination with NYSDOS as needed.
- Capital Improvement Plan (CIP): Municipalities should incorporate LWRP projects into their Capital Improvement Plans. The CIP is a budgeting and financial tool used by local governments to plan and fund long-term investments in physical infrastructure, facilities, and assets. By including LWRP projects in the CIP, municipalities can prioritize and allocate funds for the implementation of these projects over a multi-year period, ensuring the successful execution of the LWRP.

### POTENTIAL STATE FUNDING SOURCES

- Environmental Protection Fund (EPF): This grant program offers support for the implementation of planning, design, and construction of waterfront revitalization projects, as well as improvements for parks

and recreation and historic preservation. Funding for this program is available through the Consolidated Funding Application (CFA) process, with funds available from the Department of State, Office of Parks, Recreation and Historic Preservation, and the Department of Environmental Conservation.

- Water Quality Improvement Program (WQIP): This program, available via the Environmental Protection Fund, provides competitive funds for projects that improve water quality, reduce polluted runoff, and restore water habitats.
- Local Government Efficiency Program (LGE): NYSDOS offers grant funds to municipalities, special districts, school districts, and public authorities for the planning and implementation of projects that will provide cost savings through consolidated services.
- Environmental Facilities Corporation – Green Innovation Grant: This program offers competitive grants to municipalities, public authorities, not for profit corporations, for-profit corporations and soil and water conservation districts for projects that improve water quality through the reduction of storm sewer infiltration and the use of “green infrastructure” such as permeable pavement, green roofs, riparian buffers, and stormwater harvesting and reuse.
- Empire State Development Programs (ESD): ESD provides a variety of programs to assist businesses and bolster economic development. Programs include Empire State Development Grant Funds, Excelsior Jobs Tax Credits, Market New York, Business Incubator and Innovation Hot Spot, etc.
- Consolidated Funding Application (CFA): The CFA process allows for a project to submit a single application to the State while requesting funding from one or more state programs and funding streams.



## CONSOLIDATED FUNDING APPLICATION (CFA)

As part of New York's efforts to improve the business climate and expand economic growth, the NYS Consolidated Funding Application (CFA) was created to support the Regional Economic Development Council (REDC) Initiative.

The CFA allows applicants to access multiple state funding sources through one application, making the process quicker, easier, and more productive.

Plan ahead! The CFA typically opens in May each year and grant applications must be submitted by the end of July. Many funding programs also require a local resolution to be passed in support of the grant application.





## SECTION 6

# STATE ACTIONS AND PROGRAMS LIKELY TO AFFECT IMPLEMENTATION

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This section details State actions that will affect and be affected by implementation of individual municipal LWRS's. Under State Law and the U.S. Coastal Zone Management Act, certain State actions within or affecting the local waterfront revitalization area must be consistent, or consistent to the maximum extent practicable, with the enforceable policies and purposes of the LWRS. This consistency requirement makes the LWRS a unique, intergovernmental mechanism for setting policy and making decisions, and helps to prevent detrimental actions from occurring and future options from being needlessly foreclosed. At the same time, the active participation of State agencies is also likely to be necessary to implement specific provisions of the LWRS.

## SECTION 6.1

# STATE ACTIONS AND PROGRAMS WHICH SHOULD BE UNDERTAKEN IN A MANNER CONSISTENT WITH THE LWRS

Pursuant to the State Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Executive Law, Article 42), the Secretary of State notifies affected State agencies of those agency actions and programs that are to be undertaken in a manner consistent with approved LWRSs. The following list of State actions and programs is that list, which is applicable to municipalities in Broome County. The State Waterfront Revitalization of Coastal Areas and Inland Waterways Act requires that each municipal LWRS identifies those elements of the program that can be implemented by the local government, unaided, and those that can only be implemented with the aid of other levels of government or other agencies. As municipalities within Broome County advance their LWRS processes, further review of this list should be considered and incorporated.

### OFFICE FOR THE AGING

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

### DEPARTMENT OF AGRICULTURE AND MARKETS

- 1.00 Agricultural Districts Program
- 2.00 Rural Development Program
- 3.00 Farm Worker Services Program
- 4.00 Permit and approval programs:
  - 4.01 Custom Slaughters/Processor Permit
  - 4.02 Processing Plant License
  - 4.03 Refrigerated Warehouse and/or Locker Plant License
- 5.00 Farmland Protection Implementation Grant
- 6.00 Agricultural Nonpoint Source Abatement and Control Program

### DIVISION OF ALCOHOLIC BEVERAGE CONTROL/STATE LIQUOR AUTHORITY

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

## OFFICE OF ALCOHOLISM AND SUBSTANCE ABUSE SERVICES

- 1.00 Facilities, construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
  - 2.01 Certificate of approval (Substance Abuse Services Program)
- 3.00 Permit and approval:
  - 3.01 Letter Approval for Certificate of Need
  - 3.02 Operating Certificate (Alcoholism Facility)
  - 3.03 Operating Certificate (Community Residence)
  - 3.04 Operating Certificate (Outpatient Facility)
  - 3.05 Operating Certificate (Sobering-Up Station)

## COUNCIL ON THE ARTS

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

## OFFICE OF CHILDREN AND FAMILY SERVICES

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

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

## DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

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

## DORMITORY AUTHORITY OF THE STATE OF NEW YORK

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

## EDUCATION DEPARTMENT

- 1.00 Facilities construction, rehabilitation, expansion, demolition or the funding of such activities.
- 2.00 Permit and approval programs:
  - 2.01 Certification of Incorporation (Regents Charter)
  - 2.02 Private Business School Registration
  - 2.03 Private School License
  - 2.04 Registered Manufacturer of Drugs and/or Devices
  - 2.05 Registered Pharmacy Certificate
  - 2.06 Registered Wholesale of Drugs and/or Devices
  - 2.07 Registered Wholesaler-Repacker of Drugs and/or Devices
  - 2.08 Storekeeper's Certificate
  - 3.00 Administration of Article 5, Section 233 of the Educational Law regarding the removal of archaeological and paleontological objects under the waters of the State.

## SECTION 6.1

# STATE ACTIONS AND PROGRAMS WHICH SHOULD BE UNDERTAKEN IN A MANNER CONSISTENT WITH THE LWRS (CONT.)

### OFFICE OF EMERGENCY MANAGEMENT

- Hazard identification,
- Loss prevention, planning, training,
- Operational response to emergencies,
- Technical support, and disaster recovery assistance

### EMPIRE STATE DEVELOPMENT/EMPIRE STATE DEVELOPMENT CORPORATION

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

### ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

- 1.00 Issuance of revenue bonds to finance pollution abatement modifications in power-generation facilities and various energy projects.
- 2.00 New Construction Program – provide assistance to incorporate energy-efficiency measures into the design, construction and operation of new and substantially renovated buildings.
- 3.00 Existing Facilities Program – offers incentives for a variety of energy projects

### DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- 1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of lands under the jurisdiction of the Department.
- 2.00 Classification of Waters Program; classification of land areas under the Clean Air Act.

- 3.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 4.00 Financial assistance/grant programs:
- 4.01 Capital projects for limiting air pollution
- 4.02 Cleanup of toxic waste dumps
- 4.03 Flood control, beach erosion, and other water resource projects
- 4.04 Operating aid to municipal wastewater treatment facilities
- 4.05 Resource recovery and solid waste management capital projects
- 4.06 Wastewater treatment facilities
- 6.00 Implementation of the Environmental Quality Bond Act of 1972, including:
- (a) Water Quality Improvement Projects
- (b) Land Preservation and Improvement Projects including Wetland Preservation and Restoration Projects, Unique Area Preservation Projects, Metropolitan Parks Projects, Open Space Preservation Projects, and Waterways Projects.
- 7.00 Marine Finfish and Shellfish Programs
- 9.00 Permit and approval programs

### Air Resources

- 9.01 Certificate of Approval for Air Pollution Episode Action Plan
- 9.02 Certificate of Compliance for Tax Relief – Air Pollution Control Facility
- 9.03 Certificate to Operate: Stationary Combustion Installation; Incinerator; process, exhaust or Ventilation System
- 9.04 Permit for Burial of Radioactive Material
- 9.05 Permit for Discharge of Radioactive Material to Sanitary Sewer
- 9.06 Permit for Restricted Burning
- 9.07 Permit to Construct; a Stationary Combustion Installation; Incinerator; Indirect Source of Air Contamination; Process, Exhaust or Ventilation System

### Construction Management

- 9.08 Approval of Plans and Specifications for Wastewater Treatment Facilities

### Fish and Wildlife

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

### Hazardous Substances

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

### Lands and Forest

- 9.27 Certificate of Environmental Safety (Liquid Natural Gas/Liquid Petroleum Gas)

- 9.28 Floating Object Permit
- 9.29 Marine Regatta Permit
- 9.30 Navigation Aid Permit

### Marine Resources

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

### Mineral Resources

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

### Solid Wastes

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

### Water Resources

- 9.49 Approval of Plans for Wastewater Disposal Systems
- 9.50 Certificate of Approval of Realty Subdivision Plans

## SECTION 6.1

# STATE ACTIONS AND PROGRAMS WHICH SHOULD BE UNDERTAKEN IN A MANNER CONSISTENT WITH THE LWRS (CONT.)

- 9.51 Certificate of Compliance (Industrial Wastewater Treatment Facility)
- 9.52 Letters of Certification for Major Onshore Petroleum Facility Oil Spill Prevention and Control Plan
- 9.53 Permit Article 36, (Construction in Flood Hazard Areas)
- 9.54 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas
- 9.55 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas
- 9.56 State Pollutant Discharge Elimination System (SPDES) Permit
- 9.57 Approval – Drainage Improvement District
- 9.58 Approval – Water (Diversions for Power)
- 9.59 Approval of Well System and Permit to Operate
- 9.60 Permit – Article 15, (Protection of Water) – Dam
- 9.61 Permit – Article 15, Title 15 (Water Supply)
- 9.62 River Improvement District Permits
- 9.63 River Regulatory District approvals
- 9.64 Well Drilling Certificate of Registration
- 9.65 401 Water Quality Certification
- 10.00 Preparation and revision of Air Pollution State Implementation Plan.
- 11.00 Preparation and revision of Continuous Executive Program Plan.
- 12.00 Preparation and revision of Statewide Environmental Plan.
- 13.00 Protection of Natural and Man-made Beauty Program.
- 14.00 Urban Fisheries Program.
- 15.00 Urban Forestry Program.
- 16.00 Urban Wildlife Program.

### ENVIRONMENTAL FACILITIES CORPORATION

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

### DEPARTMENT OF FINANCIAL SERVICES (DEPARTMENT OF BANKING)

- 1.00 Permit and approval programs:
- 1.01 Authorization Certificate (Bank Branch)
- 1.02 Authorization Certificate (Bank Change of Location)
- 1.03 Authorization Certificate (Bank Charter)
- 1.04 Authorization Certificate (Credit Union Change of Location)
- 1.05 Authorization Certificate (Credit Union Charter)
- 1.06 Authorization Certificate (Credit Union Station)
- 1.07 Authorization Certificate (Foreign Banking Corporation Change of Location)
- 1.08 Authorization Certificate (Foreign Banking Corp. Public Accommodations Office)
- 1.09 Authorization Certificate (Investment Company Branch)
- 1.10 Authorization Certificate (Investment Company Change of Location)
- 1.11 Authorization Certificate (Investment Company Charter)
- 1.12 Authorization Certificate (Licensed Lender Change of Location)
- 1.13 Authorization Certificate (Mutual Trust Company Charter)
- 1.14 Authorization Certificate (Private Banker Charter)
- 1.15 Authorization Certificate (Public Accommodation Office – Banks)

1.16	Authorization Certificate (Safe Deposit Company Branch)	2.00	Administration of Article 4 B, Public Buildings Law, in regard to the protection and management of State historic and cultural properties and State uses of buildings of historic, architectural or cultural significance.
1.17	Authorization Certificate (Safe Deposit Company Change of Location)		
1.18	Authorization Certificate (Safe Deposit Company Charter)		
1.19	Authorization Certificate (Savings Bank Charter)		
1.20	Authorization Certificate (Savings Bank DeNovo Branch Office)	3.00	Facilities construction, rehabilitation, expansion, or demolition.
1.21	Authorization Certificate (Savings Bank Public Accommodations Office)	4.00	Administration of Article 5, Section 233, Subsection 5 of the Education Law on removal of archaeological and paleontological objects under the waters of the State.
1.22	Authorization Certificate (Savings and Loan Association Branch)		
1.23	Authorization Certificate (Savings and Loan Association Change of Location)	5.00	Administration of Article 3, Section 32 of the Navigation Law regarding location of structures in or on navigable waters.
1.24	Authorization Certificate (Savings and Loan Association Charter)		
1.25	Authorization Certificate (Subsidiary Trust Company Charter)	6.00	Section 334 of the State Real Estate Law regarding subdivision of waterfront properties on navigable waters to include the location of riparian lines.
1.26	Authorization Certificate (Trust Company Branch)		
1.27	Authorization Certificate (Trust Company – Change of Location)		
1.28	Authorization Certificate (Trust Company Charter)		
1.29	Authorization Certificate (Trust Company Public Accommodations Office)		
1.30	Authorization to Establish a Life Insurance Agency		
1.31	License as a Licensed Lender		
1.32	License for a Foreign Banking Corporation Branch		

## OFFICE OF GENERAL SERVICES

1.00	Administration of the Public Lands Law for acquisition and disposition of lands, grants of land and grants of easement of land under water, issuance of licenses for removal of materials from lands under water, and oil and gas leases for exploration and development.
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## SECTION 6.1

# STATE ACTIONS AND PROGRAMS WHICH SHOULD BE UNDERTAKEN IN A MANNER CONSISTENT WITH THE LWRS (CONT.)

### DEPARTMENT OF HEALTH

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
  - 2.01 Approval of Completed Works for Public Water Supply Improvements
  - 2.02 Approval of Plans for Public Water Supply Improvements.
  - 2.03 Certificate of Need (Health Related Facility except Hospitals)
  - 2.04 Certificate of Need (Hospitals)
  - 2.05 Operating Certificate (Diagnostic and Treatment Center)
  - 2.06 Operating Certificate (Health Related Facility)
  - 2.07 Operating Certificate (Hospice)
  - 2.08 Operating Certificate (Hospital)
  - 2.09 Operating Certificate (Nursing Home)
  - 2.10 Shared Health Facility Registration Certificate

### DIVISION OF HOMES AND COMMUNITY RENEWAL and its subsidiaries and affiliates

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Financial assistance/grant programs:
  - 2.01 Federal Housing Assistance Payments Programs (Section 8 Programs)
  - 2.02 Housing Development Fund Programs
  - 2.03 Neighborhood Preservation Companies Program
  - 2.04 Public Housing Programs
  - 2.05 Rural Initiatives Grant Program
  - 2.06 Rural Preservation Companies Program
  - 2.07 Rural Rental Assistance Program
  - 2.08 Special Needs Demonstration Projects
  - 2.09 Urban Initiatives Grant Program

- 2.10 Urban Renewal Programs
- 3.00 Preparation and implementation of plans to address housing and community renewal needs.

### OFFICE OF MENTAL HEALTH

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
  - 2.01 Operating Certificate (Community Residence)
  - 2.02 Operating Certificate (Family Care Homes)
  - 2.03 Operating Certificate (Inpatient Facility)
  - 2.04 Operating Certificate (Outpatient Facility)

### DIVISION OF MILITARY AND NAVAL AFFAIRS

- 1.0 Preparation and implementation of the State Disaster Preparedness Plan.

### NATURAL HERITAGE TRUST

- 1.0 Funding program for natural heritage institutions.

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

- 1.00 Acquisition, disposition, lease, grant of easement, or other activities related to the management of land under the jurisdiction of the Office.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 3.00 Funding program for recreational boating, safety, and enforcement.
- 4.00 Funding program for State and local historic preservation projects.

- 5.00 Land and Water Conservation Fund programs.
- 6.00 Nomination of properties to the Federal and/or State Register of Historic Places.
- 7.00 Permit and approval programs:
  - 7.01 Floating Objects Permit
  - 7.02 Marine Regatta Permit
  - 7.03 Navigation Aide Permit
  - 7.04 Posting of Signs Outside State Parks
- 8.00 Preparation and revision of the Statewide Comprehensive Outdoor Recreation Plan and the Statewide Comprehensive Historic Preservation Plan and other plans for public access, recreation, historic preservation or related purposes.
- 9.00 Recreation services program.
- 10.00 Urban Cultural Parks Program.
- 11.00 Planning, construction, rehabilitation, expansion, demolition or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.

### **OFFICE FOR PEOPLE WITH DEVELOPMENTAL DISABILITIES**

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
  - 2.01 Establishment and Construction Prior Approval
  - 2.02 Operating Certificate Community Residence
  - 2.03 Outpatient Facility Operating Certificate

### **POWER AUTHORITY OF THE STATE OF NEW YORK**

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

### **ROCHESTER-GENESEE REGIONAL TRANSPORTATION AUTHORITY (regional agency)**

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

### **NEW YORK STATE SCIENCE AND TECHNOLOGY FOUNDATION**

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

## SECTION 6.1

# STATE ACTIONS AND PROGRAMS WHICH SHOULD BE UNDERTAKEN IN A MANNER CONSISTENT WITH THE LWRS (CONT.)

### DEPARTMENT OF STATE

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

### STATE UNIVERSITY CONSTRUCTION FUND

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

### STATE UNIVERSITY OF NEW YORK

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

### DEPARTMENT OF TRANSPORTATION

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

- 2.00 Construction, rehabilitation, expansion, or demolition of facilities, including but not limited to: (a) Highways and parkways (b) Bridges on the State highways system (c) Highway and parkway maintenance facilities (d) Rail facilities
- 3.00 Financial assistance/grant programs:
  - 3.01 Funding programs for construction/reconstruction and reconditioning/preservation of municipal streets and highways (excluding routine maintenance and minor rehabilitation)
  - 3.02 Funding programs for development of the ports of Albany, Buffalo, Oswego, Ogdensburg and New York
  - 3.03 Funding programs for rehabilitation and replacement of municipal bridges
  - 3.04 Subsidies program for marginal branch lines abandoned by Conrail
  - 3.05 Subsidies program for passenger rail service
- 4.00 Permits and approval programs:
  - 4.01 Approval of applications for airport improvements (construction projects)
  - 4.02 Approval of municipal applications for Section 18 Rural and Small Urban Transit Assistance Grants (construction projects)
  - 4.03 Approval of municipal or regional transportation authority applications for funds for design, construction and rehabilitation of omnibus maintenance and storage facilities
  - 4.04 Approval of municipal or regional transportation authority applications for funds for design and construction of rapid transit facilities
  - 4.05 Certificate of Convenience and Necessity to Operate a Railroad
  - 4.06 Highway Work Permits
  - 4.07 License to Operate Major Petroleum Facilities

- 4.08 Outdoor Advertising Permit (for off premises advertising signs adjacent to interstate and primary highway)
- 4.09 Real Property Division Permit for Use of State Owned Property
- 5.00 Preparation or revision of the Statewide Master Plan for Transportation and sub-area or special plans and studies related to the transportation needs of the State.
- 6.00 Water Operation and Maintenance Program Activities related to the containment of petroleum spills and development of an emergency oil spill control network.

## DIVISION OF YOUTH

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

## COMMUNITY RATING SYSTEM

The Community Rating System (CRS) is a voluntary program of the National Flood Insurance Program (NFIP) that rewards communities with reduced flood insurance premiums for actions that go above and beyond the minimum requirements for participation in the NFIP. As of August 2019, there are 1,505 communities that participate in the NFIP in New York. Of these communities, 34 (or 2%) participate in the CRS. CRS credit points are earned for a wide range of floodplain management activities, which are organized under four categories with 19 activities. The following municipalities in Broome County participate in the CRS:

- Town of Chenango (Class 9)
- Town of Union (Class 8)
- Village of Johnson City (Class 9)

The LWRS may provide opportunities for municipalities in Broome County to earn additional points towards CRS certification.

## SECTION 6.2

# STATE ACTIONS AND PROGRAMS LIKELY TO AFFECT IMPLEMENTATION

**Part 6.2 provides a more focused and descriptive list of the immediately preceding Part 6.1 listing under Section 6, entitled “State Actions and Programs Likely to Affect Implementation”. It is recognized that a State agency’s ability to undertake these listed actions is subject to a variety of factors and considerations; that the consistency provisions of an approved LWRS may not apply; and, that the consistency requirements cannot be used to require a State agency to undertake an action it could not undertake pursuant to other provisions of law. Reference should also be made to Section 2, Section 4, and Section 5, which discuss local goals, proposed projects, and local implementation techniques, including State assistance needed to implement the approved LWRS.**

### CANAL CORPORATION

- Provision of approvals and permits for development activities, and the acquisition, disposition, lease, grant of easements or other activities on Canal Corporation lands.

### DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- Funding assistance with planning studies and/or design and construction of projects targeted to control the erosion of steep slopes in Broome County’s waterfront area.
- Review and approval for septic system installation and replacement in areas without public septic systems of the Broome County WRA.
- Implement and administer Article 24 of the State’s Environmental Conservation Law for existing wetlands areas.

- Map, adopt, and administer the State’s Section 505 Coastal Erosion Control legislation.
- Technical assistance, review, and approval of public access improvements within Broome County’s waterfront areas.

### DIVISION OF HOMES AND COMMUNITY RENEWAL

- Funding and technical assistance with revitalization efforts in the Broome County WRA.

### ENVIRONMENTAL FACILITIES CORPORATION

- Funding assistance for the planning, design and construction of sewer extensions or other improvement projects within Broome County.

### DEPARTMENT OF STATE

- Funding and technical assistance for LWRS implementation of various planning, design and construction projects, as outlined in Section IV of this Program.
- Funding assistance through the Environmental Protection Fund for various waterfront, park, trail, historic, blueway and revitalization projects.
- Funding and technical assistance through the Brownfield Opportunity Area Program for properties within the Broome County WRA.

### **NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY**

- Funding and technical assistance with energy efficiency studies and projects.

### **NEW YORK STATE DEPARTMENT OF TRANSPORTATION**

- Provide improvements to Empire Boulevard which will improve circulation and access for pedestrians and bicyclists.
- Provide traffic calming improvements to roadways throughout the Broome County WRA.

### **EMPIRE STATE DEVELOPMENT CORPORATION**

- Assistance is needed for the preparation of economic feasibility studies for the reuse of various deteriorated and unutilized structures, with the siting or improvement of public facilities and with revitalization efforts within the Broome County WRA.

### **OFFICE OF GENERAL SERVICES**

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

### **OFFICE OF PARKS, RECREATION, AND HISTORIC PRESERVATION**

- Funding assistance for the planning, design and construction of expansion or improvement projects throughout the Broome County WRA.
- Funding approval under programs such as the Land and Water Conservation Fund and the Clean Water / Environmental Protection Fund for development of or improvements to waterfront parkland.
- Provide funding assistance to Broome County and individual municipalities for the planning, development, construction, major renovation, or expansion of existing and planned recreational facilities located in or adjacent to waterfront area.



## SECTION 7

## LOCAL COMMITMENT AND CONSULTATION

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This section describes actions taken by the County to obtain local input and support for the LWRS and local commitment to its implementation. The County consulted with adjacent municipalities and appropriate state and regional agencies during the development of the LWRS in order to foster collaboration and coordination. This comprehensive public participation has built widespread awareness of and engagement with the LWRS, laying the foundation for continued involvement in carrying out the plan.

## SECTION 7.1

# COMMUNITY PARTICIPATION

**Community participation played a critical role in helping to identify projects and overall vision for the Broome County LWRS. The LWRS document reflects community input obtained through a variety of outreach and engagement activities which occurred over the course of the planning process. Various engagement techniques were used to ensure a diversity of stakeholders and perspectives were solicited to inform plan development.**

### KEY ENGAGEMENT

A summary of key engagement activities are summarized within, with additional supporting materials included within the Appendices of this report.

#### Waterfront Advisory Committee (WAC)

Three meetings were held with the Waterfront Advisory Committee. The first meeting focused on a project introduction and included discussion around existing conditions and needs and opportunities. The second meeting included a preliminary discussion of proposed projects, and the third meeting included a review of proposed projects and discussion with WAC members. Meetings were held in September 2020, February 2021 and May 2021.

The WAC membership was diverse, including representatives from Broome County Planning, GIS, Parks and the Department of Public Works. Representatives from each of the County's 24 municipalities were also invited to participate in the WAC. In addition, key partner agencies and organizations were also represented and participated in the WAC, including Binghamton Metropolitan Transportation Study, the Soil and Water Conservation District, Visit Bing, Susquehanna Heritage Area, The Agency, the Broome County Stormwater Coalition and Cornell Cooperative Extension. Representatives from the New York State Department of State

also participated in WAC meetings as they were responsible for providing technical assistance and general oversight over the course of the project.

#### Other Engagement

A parallel effort exploring the creation of a regional Southern Tier Water Trail coincided with the timing of the preparation of the Broome County LWRS. The project team met with key stakeholders collaborating on the regional initiative, including Visit Bing and the Steuben County Conference & Visitors Bureau, to learn more about the effort and how the two initiatives could complement one another. The first informational meeting was held in February 2022. In April 2022 the project team participated in a stakeholder meeting, lead by the Southern Tier Water Trail group, to learn more about the project, community vision and opportunities.

#### Project Website & Online Survey

Early in the process a website was established under the domain – broomewaterfront.com. The website offered a comments page that allowed visitors to share feedback on the project anytime with the project team, included information on meetings and provided general information about the project. In addition, multiple online surveys were administered over the course of the project that were accessible from the project website.

[www.broomewaterfront.com](http://www.broomewaterfront.com)



**UPCOMING EVENTS**

BROOME COUNTY | LOCAL WATERFRONT REVITALIZATION PROGRAM (LWRP)  
**UPCOMING PUBLIC EVENT!**

SHARE YOUR THOUGHTS ON BROOME COUNTY'S PUBLIC PLAN FOR  
**TUESDAY, AUGUST 30, 2022**  
 9:30-7:30PM  
 OTSIRINGO PARK

**JOIN US!**

**We need your ideas!**

**A Little More About the County's LWRP...**

**Stay Engaged...**

CLICK TO ENLARGE



**BROOME COUNTY**  
 LOCAL WATERFRONT REVITALIZATION PROGRAM

**ABOUT THE PROJECT**

**PROJECT RESOURCES**

**MEETINGS**

**CONTACT US**

## SECTION 7.1

# COMMUNITY PARTICIPATION (CONT.)

### PUBLIC OUTREACH EVENTS

Three rounds of outreach events were scheduled over the course of the project. The various meetings and workshops were held to inform the public about the planning process and to solicit feedback on plan direction and recommendations.

#### Public Outreach Event #1

The first round of meetings was held in February 2021 and consisted of two virtual meetings, one focused on rural municipalities in the County, and one geared towards urban municipalities in the County. An online interactive survey tool, called Mentimeter, was used to solicit feedback on the project in the virtual environment.

Feedback from attendees of both urban and rural communities was consistent, with attendees noting they appreciated the river as both a recreational and natural resource and largely utilized the waterfront area for wildlife viewing, swimming and boating. Desired improvements included more public access points, increased amenities, natural resource protection, better connectivity and improved programming and special events.

#### Public Outreach Event #2

The second round of public engagement was held in August 2021 and consisted of various alternatives for community members to participate. On August 3, 2021 Pop-Up Events were held at the Vestal Rail Trail and Otsiningo Park. On August 4th, a virtual presentation was offered introducing the LWRS project. A third introductory pop-up was held on August 7th at the Windsor Farmers Market.

Attendees noted the desire for waterfront trails, more kids programming, increased access to bike and boat rentals, the need for enhanced maintenance of parks and four season programming, such as ice skating.

Other key themes that emerged were the coordination of programming across the county as well as the need for enhanced awareness and education campaigns.

#### Public Outreach Event #3

The final public engagement event was scheduled for August 23, 2022 at Otsiningo Park. The pop-up event was focused on sharing project recommendations and soliciting final feedback from the public. Inclement weather caused the meeting to be rescheduled to August 30, 2022. An online survey was ultimately created to share the project ideas and solicit feedback as meeting attendance was limited due to weather.

#### Public Outreach Event #4

A virtual public meeting was held in April 2024 to present the final plan.



Public Outreach Event #1; Photo Credit: Bergmann