

FOUR RIVERS

An Intermunicipal Waterfront Public Access Plan for Broome County

Final Report
December 2011

DESIGN based **PLANNING**
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United States: Buffalo, New York • Canada: Fort Erie, Ontario

Chenango, Delaware, Susquehanna and Tioughnioga Rivers

Broome County

Intermunicipal Waterfront Public Access Plan

Prepared by:
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Buffalo, New York - Fort Erie, Ontario

For the Communities of the Chenango, Delaware, Susquehanna and Tioughnioga Rivers:

City of Binghamton
Town of Barker
Town of Chenango
Town of Colesville
Town of Conklin
Town of Dickinson
Town of Fenton

Broome County
Town of Kirkwood
Town of Lisle
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

Lead Agency: Town of Vestal

FINAL REPORT - December 2011



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Contents

1	<i>Executive Summary</i>	2	6	<i>Inventory & Analysis</i>	60
2	<i>Defining the Riverway</i>	3	6.1	Broome County River History.....	60
2.1	Four Rivers: A Defining Vision for the Riverway.....	3	6.2	Land Use.....	60
2.2	Project Area.....	4	6.3	Water & Water Conditions.....	68
2.3	Public Participation Overview.....	8	6.4	Environmental Considerations.....	70
2.4	Riverfront Character Areas.....	12	6.5	Recreation and Public Access.....	76
3	<i>Priority Waterfront Access Projects</i>	14	6.6	Public Infrastructure.....	80
3.1	Boat Launches.....	14		<i>Appendices</i>	A-1
3.2	Riverside Park Improvements.....	20		<i>Appendix I:</i>	
3.3	Fishing Access.....	24		<i>Narrative Description of the Proposed Study Area Boundary</i>	A-2
3.4	Trail-related Projects.....	26	I.I	Susquehanna-Chenango-Tioughnioga-Otselic Section.....	A-2
3.5	Scenic Overlooks.....	32	I.II	Upper Susquehanna Section.....	A-5
3.6	Interpretive Sites.....	36	I.III	Delaware West Branch Section.....	A-5
3.7	Waterfront Project Evaluation and Priority.....	39	I.IV	Supplemental Study Area.....	A-5
4	<i>Implementation Strategy</i>	42		<i>Appendix II: Public Input</i>	A-6
4.1	Recommendations - Quick Wins.....	42		<i>Appendix III: GIS Database</i>	A-24
4.2	Recommendations - Medium-term.....	44		<i>Appendix IV: Funding Sources</i>	A-34
4.3	Model Project Implementation – A Tool For Grantwriting.....	48		<i>Appendix V: Waterfront Project Listings</i>	A-36
5	<i>Tourism & Market Analysis – A Riverway Economy</i>	50		<i>Appendix VI: Bibliography</i>	A-38
5.1	Pieces of the Future.....	51			
5.2	Demographic Excerpt.....	51			
5.3	Tourism Industry Overview.....	52			
5.4	Developing a Riverway Economy.....	54			
5.5	Returning to the Water.....	56			
5.6	Branding the Riverway.....	58			

1 Executive Summary

This document will serve as a resource to guide future development activity along Broome County's riverfronts: the Susquehanna, Tioughnioga, Chenango, Otselic and Delaware. The Broome County riverfront includes more than 89 miles of waterway that defines the region's diversity. Water traverses the densely populated areas of Vestal, Johnson City, Endicott and Binghamton and the quiet enclaves of communities like Windsor, Kirkwood and Whitney Point. The riverfronts have historically provided power for industry, transportation, agriculture, fishing and recreation and represent the once and future economic powerhouses for Broome County.

Through this Intermunicipal Waterfront Public Access Plan, the county's river communities have committed to working together by establishing a united vision for economic development, riverfront access and environmental stewardship. In all, 22 communities in Broome County have direct riverfront access and are included as part of this plan. By establishing an integrated system of water-related facilities, programs and amenities, the implemented plan will help communities provide access to the area's natural, cultural and recreational resources. Implementation of individual projects will stimulate broader economic development for communities across the region. The Plan will serve as an important guide for the New York State Department of State Division of Coastal Resources to prioritize projects for funding. The document can be used in place of a formal Local Waterfront Revitalization Plan (LWRP) and be just as effective. The primary advantage of completing a full LWRP is to establish a cohesive set of municipal planning policies. Broome County may decide to do an LWRP in the future to help the county and its municipalities achieve the vision established here for the county's riverfronts.

The Intermunicipal Waterfront Public Access Plan seeks to integrate existing regional attractions (boating facilities, parks, campgrounds, picnic areas, museums, shops, restaurants, etc.) in Broome County with proposed new projects. These proposed new projects include, but are not limited to, new access points along each of the rivers that allow for motorized and non-motorized boat launch as well as observation overlooks and fishing piers. New trails along Broome County waterways are proposed to create continuous access and connect to existing trails and population centers to

increase access, stimulate economic development, and encourage a wide variety of user experiences. Revitalization plans for urban centers near the riverfronts are also some of the projects that might be included.

Elements of the Intermunicipal Waterfront Public Access Plan include:

- ◆ A comprehensive Vision for the Broome County riverfronts as defined through the public process
- ◆ A comprehensive list of proposed projects throughout the county
- ◆ A chapter detailing potential economic impacts of riverfront development
- ◆ Prioritization of development projects including general costs and timelines for completion
- ◆ Identification of potential funding sources for each project
- ◆ A comprehensive GIS database and written description of existing inventory elements surrounding the riverfronts
- ◆ A compendium of all public input gathered throughout the course of the process.

Ultimately, the Plan is intended to serve as a tool for each riverfront community in Broome County to create a comprehensive riverfront experience. The experience will attract new visitors to stimulate the local economy and improve existing quality of life for residents by enabling them to interact with their riverfront.

2 Defining the Riverway

2.1 Four Rivers: A Defining Vision for the Riverway

Broome County's river corridors present tremendous opportunities for unique tourism growth and economic stabilization. The riverfronts can also contribute toward establishing a defining identity for the region that will stimulate further growth and development. The opportunities offered by riverfront development may also present development pressures that could threaten environmental sustainability. The Intermunicipal Waterfront Access Plan sets forth a comprehensive vision that embraces a dual approach: a focus on both regional economic development and environmental stewardship. For ease of discussion, the waterways included within the study area will be referred to as the Riverway. A Riverway can be defined as a comprehensive waterfront system that provides a regional identity and embraces the dual notion of economic development and environmental protection.

2.1.1 Promoting a "Riverway" Economy

Strategic development of the Riverway offers opportunity for new economic growth through tourism and recreational activity. Development will also grow the value and desirability of property throughout the county. The Riverway will preserve and provide access to natural landscapes that enhance quality of life and, potentially, the viability of the county to attract new business.

Waterfront development of this nature has been proven to increase real estate values of adjacent properties, to attract tourists, and to increase tourism revenues. Numerous studies have been conducted on this topic by the National Park Service¹, the National Trails Training Partnership² and the Trust for Public Land³ among others quantifying the economic benefits of riverways, trails and land conservation.

Complementing the numerous "quality of life" benefits that are supported as well as tourism dollars that can be generated, riverway corridors provide a significant economic boon to the host communities simply due to their presence. Studies of home values proximate to riverways and trail networks show that there exists a direct relationship between the two.

¹ Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors, A Resource Book - National Park Service, 1995 Fourth Edition

² Economic Values of Greenways, Trails, and River Protection, <http://www.americantrails.org/resources/economics/NPSeconStudy.html>

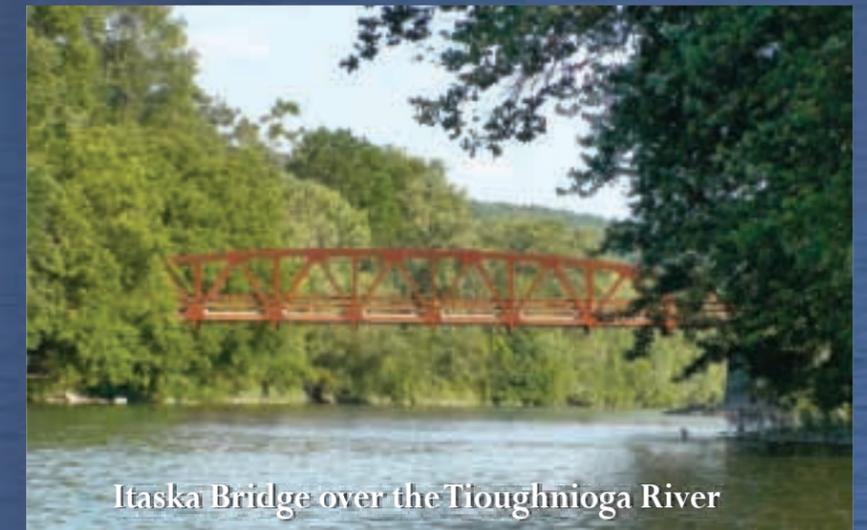
³ The Economic Benefits of Land Conservation, The Trust for Public Land, March 2007

By connecting residents and visitors to the area's natural landscapes and water-based activities, Broome County can evolve into a unique destination that prides itself upon offering the best collection of outdoor recreation opportunities in the Northeast. The end result can be a county that benefits from a new "brand" in which its residents and visitors are integrated with a beautiful landscape and a growing economy that does not impose its development upon the environment. Rather, new stewards of the landscape will preserve the area into the future.

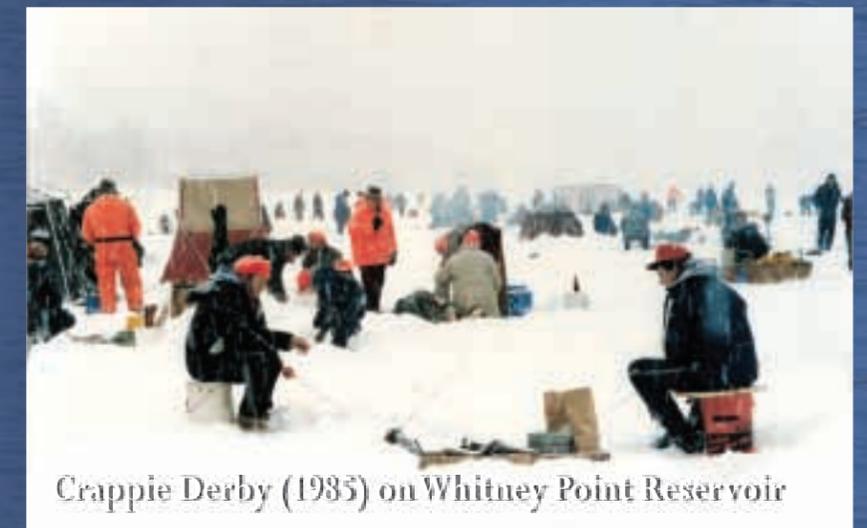
2.1.2 Environmental Benefits of the "Riverway"

Establishing the Riverway can preserve, restore and enhance the most valuable lands in Broome County with the greatest ecological diversity – the riverfronts – for the benefit of future generations. The Riverway would become a linear network of open space along both sides of the Susquehanna River, its tributaries the Chenango, Tioughnioga and Otselic Rivers, and the Delaware River. The proposed Riverway is intended to preserve and/or restore a continuous, naturalized corridor of riparian vegetation that, in addition to running along river banks, will have spurs extending to connect natural features such as wetlands; wildlife management areas; parks; large woodlots and other naturalized areas. The proposed Riverway will include a mix of private and public lands and will generally provide public access where appropriate and feasible.

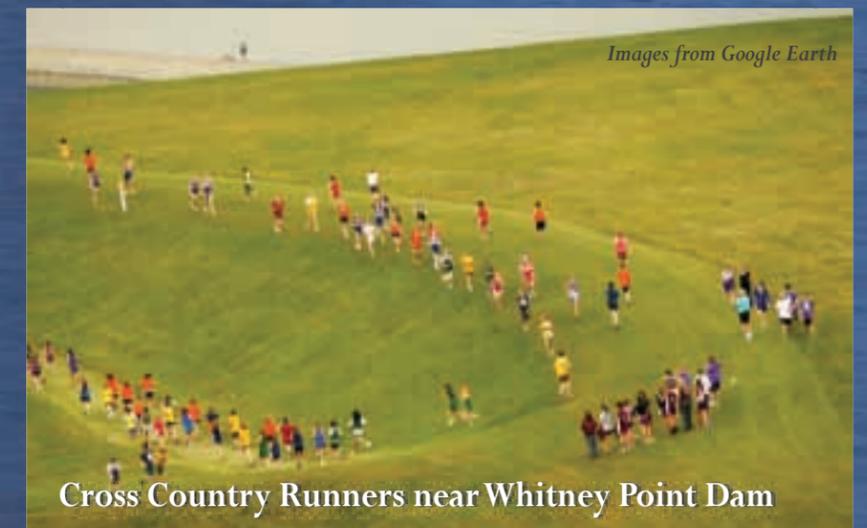
The Riverway will provide numerous ecological benefits. The Riverway will help protect flora and fauna by preserving natural areas and facilitating



Itaska Bridge over the Tioughnioga River



Crappie Derby (1985) on Whitney Point Reservoir



Cross Country Runners near Whitney Point Dam

2.2 Project Area

2.2.1 Overview

The Intermunicipal Waterfront Public Access Plan includes more than 89 miles of waterways. Over half of this length is comprised of two branches of the Susquehanna River. The Whitney Point Reservoir, which is in the study area, is five miles long. The table below summarizes the length of the Intermunicipal Waterfront Public Access Plan waterways.

Table 1 – Length of Project Area Waterways

Waterway	Length (miles)
Susquehanna from Tioga County to PA line	25.1
Susquehanna from line to PA to Chenango County	20.3
Delaware West Branch	6.8
Chenango River	15.1
Tioughnioga River	17.1
Whitney Point Reservoir	5.3
TOTAL	89.5

Source: peter j. smith & company, inc.



Image from Google Earth

Fall Foliage around Whitney Point Reservoir

Figure 1 - Proposed Riverway (right)

Source: peter j. smith & company, inc.
peter j. smith & company, inc.

movement along natural corridors. Naturally vegetated corridors can play a key role in allowing wildlife to move between habitat areas that would otherwise be isolated from one another. Connectivity between habitats allows animals to travel between different ecosystem types to meet daily and seasonal needs, and can improve the long-term health of species by increasing genetic exchange. Riverways can serve as movement corridors for plant species as well, allowing for re-colonization of disturbed areas. The Riverway may also help plant and animal communities adapt to climate change where, without sufficient regional connections between habitat areas, both may become locked into locations whose suitability for their survival will gradually decrease.⁴ It is also important to note that streams and rivers facilitate the movement of water, nutrients and sediments. As such, they also distribute municipal and industrial waste and nonpoint source pollution from upstream and local communities and agricultural fields into the linked water systems. When designed along creeks and rivers, greenways help improve water quality system-wide by filtering out sediments and non-point source pollutants before it reaches the water.

2.1.3 Regional Connections to the Riverway

As illustrated in the graphic, the proposed Riverway represents a series of linkage corridors, trail and waterway network connections to existing systems throughout New York State and into Pennsylvania. These connections represent a strategic opportunity to maximize tourism impacts by ensuring a contiguous and well planned regional Riverway system.

The Riverway will connect to the Otselic River Water Trail & Finger Lakes Trail System and Tioughnioga River Trail to the north. To the south, important connections to Town of Owego and the Pennsylvania Susquehanna Greenway and the North Branch of the Susquehanna River Water Trail can be made. To the east, links to the Chenango Connections Corridor, the Oneonta Susquehanna Greenway, the Delaware River Water Trail and the D&L Trail in Pennsylvania are established.

⁴ Smith, Daniel S. and Paul Cawood Hellmund, ed. Ecology of Greenways, University of Minnesota Press, 1993.

Planning Principles for the Riverway

The proposed Riverway can enhance the environmental, recreational and economic future of Broome County and beyond. The principles upon which future decision making should be made include:

- ◆ Promote compatible land uses in the Riverway as a model for community development.
- ◆ Protect natural heritage features and environmentally significant lands within the Riverway
- ◆ Promote biodiversity, clean water and healthy habitats in the Riverway.
- ◆ Provide a sound basis for sustainable ecological, agricultural and heritage based tourism
- ◆ Provide ecologically sensitive public access to the riverfront while protecting and enhancing the riverway system
- ◆ Revitalize Broome County's riverfront communities

PROPOSED BROOME COUNTY RIVERWAY

LEGEND

PROPOSED

- RIVERWAY
- LINKAGE CORRIDORS
- NETWORK CONNECTIONS
- LINKAGE CORRIDOR CONNECTIONS
- RIVERWAY STREAM TRIBUTARY

EXISTING

- FEMA FLOOD HAZARD
100 YEAR
500 YEAR
FLOODWAY
- PARKS
- FORESTED LANDS
- WETLANDS
- WILDLIFE MANAGEMENT AREA

NETWORK WITH
TIOUGHNIAGA RIVER TRAIL
& FINGER LAKES TRAIL SYSTEM

CONNECTIONS TO
OTSELIC RIVER WATER TRAIL
& FINGER LAKES TRAIL SYSTEM

LINK INTO CHENANGO GREENWAY
(CHENANGO CONNECTIONS CORRIDOR)

LINKS TO ONEONTA SUSQ. GREENWAY
& THE FINGER LAKES TRAIL SYSTEM



CONNECTIONS TO OWEGO VIA
HICKORIES & 17/186 TRAILS
& PA SUSQ. GREENWAY /
N. BRANCH SUSQ. RIV. WATER TRAIL /
CHEMUNG BASIN RIVER TRAIL

TIE INTO PENNSYLVANIA
SUSQUEHANNA GREENWAY

TIE INTO PENNSYLVANIA
SUSQUEHANNA GREENWAY
AND D&L TRAIL

CONNECTIONS TO THE
DELAWARE RIVER
WATER TRAIL

WEST BRANCH DELAWARE

INTERMUNICIPAL WATERFRONT PUBLIC ACCESS PLAN FOR THE COMMUNITIES OF THE CHENANGO, DELAWARE, SUSQUEHANNA & TIOUGHNIAGA RIVERS

THIS PLAN WAS PREPARED FOR THE NYSDOS WITH FUNDS PROVIDED UNDER TITLE 21 OF THE ENVIRONMENTAL PROTECTION FUND



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2.2.2 Project Boundary

The boundary for the Intermunicipal Waterfront Public Access Plan has two purposes:

- ◆ To define areas high in potential for waterfront access and for the opportunity to provide social, recreational, environmental and economic benefits; and
- ◆ To define areas for study to serve as the foundation for a future county-wide Local Waterfront Revitalization Program (LWRP) for Broome County.

The recommended Intermunicipal Waterfront Public Access Plan boundary, shown in green on the map at left, follows a corridor for each of the four rivers, the Chenango, Delaware, Susquehanna and Tioughnioga in Broome County. All of the river corridors are defined as following the nearest vehicle transportation corridor and including the back of the lot facing the opposite side of the road from the river to a depth of 500 feet or the rear of the lot, whichever is shallower.

The Delaware, Susquehanna and Tioughnioga rivers are all included within the New York State Department of State's Coastal Resources Division's inventory of inland waterways and are therefore eligible for inclusion in an LWRP. The Chenango does not fall within the definition of an inland waterway, but was included in the Binghamton LWRP because of its proximity to the Susquehanna and its prominence as a waterfront in Binghamton. Broome County is currently soliciting sponsorship for New York State to consider designation of the Chenango River, Otselic River and Whitney Point Lake as inland waterways. Designation will make these waterways eligible for LWRP funding.

All areas within 100 feet of a creek or stream within Broome County are also considered part of the study area.

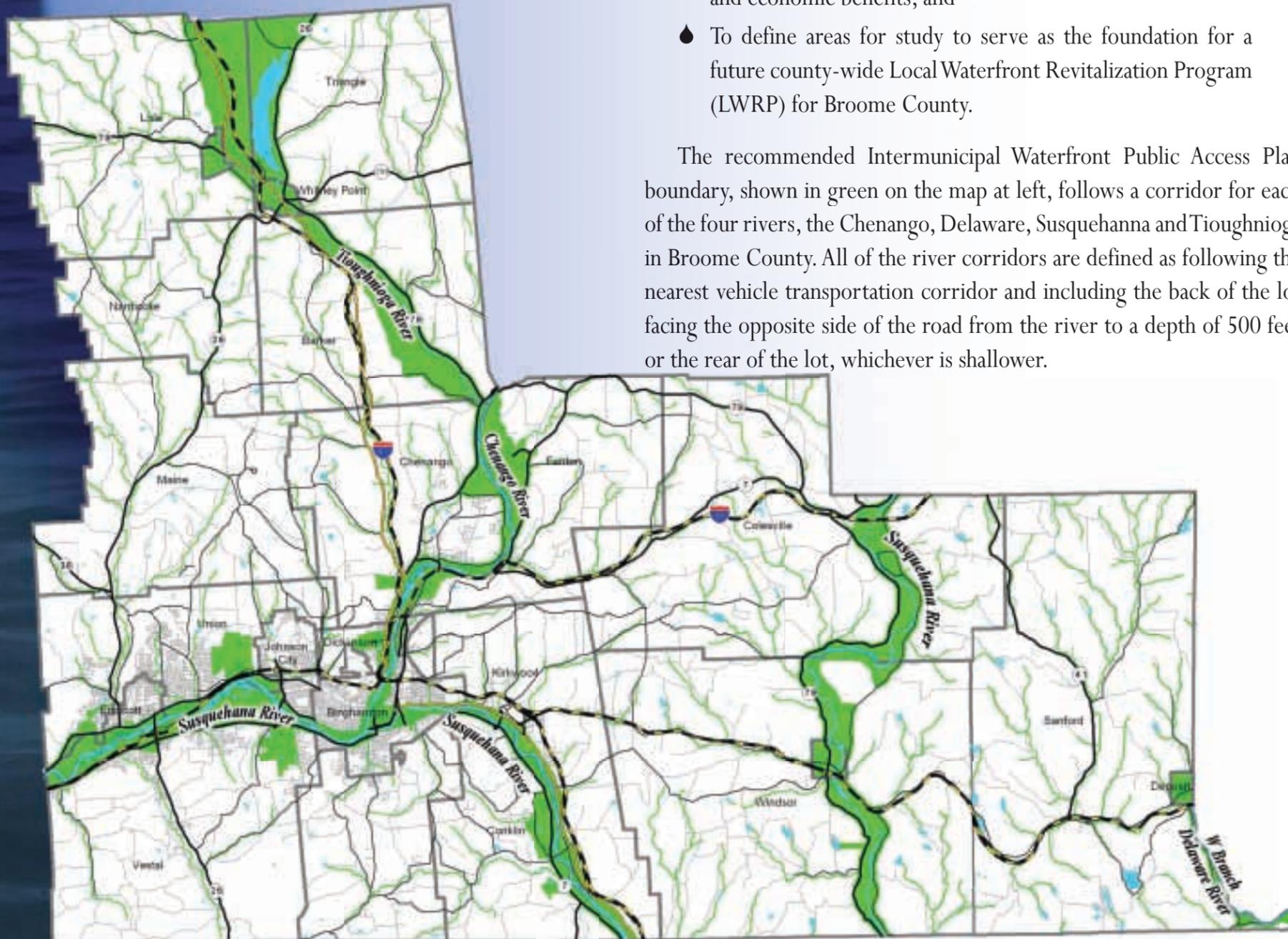


Figure 2 - Project Boundary

Intermunicipal Waterfront Public Access Plan

Source: peter j. smith & company, inc.

2.2.3 Regional Context

The Broome County project area is part of the larger Greenway and Water Trails Network established by the New York State Office of Parks, Recreation and Historic Preservation in their Statewide Trails Plan.

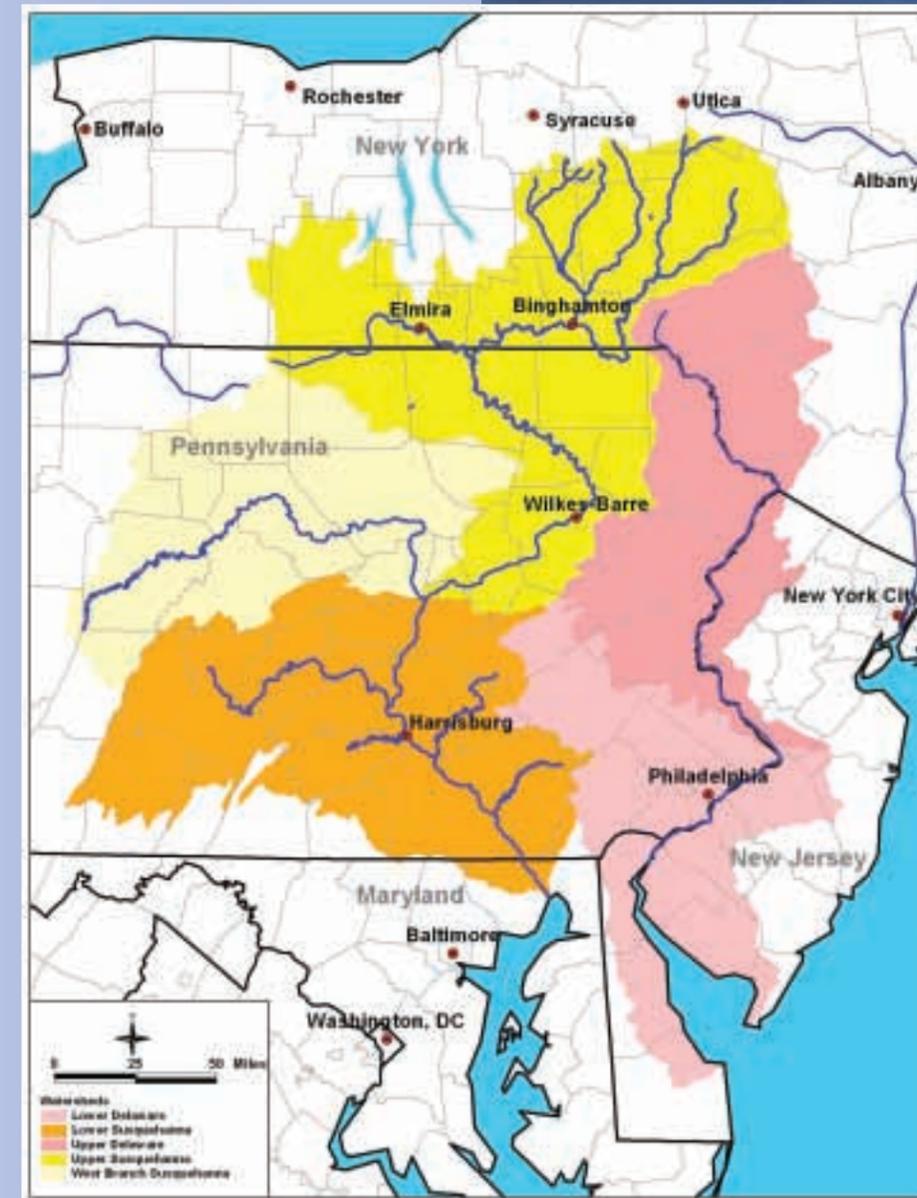


Figure 3- NYS Greenway and Water Trails Network

Source: peter j. smith & company, inc. and NYS Office of Parks, Recreation and Historic Preservation

The riverfronts that comprise the Broome County project area are also a part of the Susquehanna Watershed which ultimately empties into the Atlantic Ocean via the Chesapeake Bay.

Figure 4 - Subbasins of the Delaware & Susquehanna Watersheds
Natural Resources Conservation Service



2.3 Public Participation Overview

Public participation was a significant part of the planning effort and was solicited in the form of public meetings, focus group sessions, telephone interviews and e-mail communication. Every effort was made to ensure that the Plan reflected the wishes of the public.

Project Partners

The information and recommendations in this plan are intended to promote inter-municipal cooperation and coordination among the communities of the Chenango, Delaware, Susquehanna and Tioughnioga Rivers:

Broome County, the City of Binghamton, the towns of Barker, Chenango, Colesville, Conklin, Dickinson, Fenton, Kirkwood, Lisle, Sanford, Triangle, Union, Vestal, Windsor, villages of Deposit, Endicott, Johnson City, Lisle, Port Dickinson, Whitney Point and Windsor.

The New York State Department of State Division of Coastal Resources (DOS) participated by providing funding and technical assistance to guide the preparation of the Plan. DOS provides technical and financial assistance for plans and projects that expand public access, revitalize waterfront areas, restore habitats, and strengthen local economies.

DOS is involved in a wide variety of programs and initiatives that help revitalize, promote and protect New York's communities and waterfronts. DOS projects are designed to encourage long-term partnerships between waterfront communities and DOS to advance projects through planning, design and implementation. The Intermunicipal Waterfront Public Access Plan was prepared with funds provided to the Town of Vestal, on behalf of all of the riverfront communities, by DOS through the Environmental Protection Fund – Local Waterfront Revitalization Program.

In addition to the parties listed above, a number of other agencies, interest groups, general public and private partners (See Appendix) were consulted during the planning process.

2.3.1 *Project Goals and Objectives*

Goals and Objectives reinforce the Vision for Broome County's riverfronts. The following goals and objectives for the Intermunicipal Waterfront Access Plan were developed based on input derived through the public input process.

Goal 1 - Access

To improve public access to all riverfronts

Objectives

- to enable residents and visitors to interact with the rivers of Broome County
- to provide unobscured views of the rivers where feasible

Goal 4 - Ecology and Environment ***To enhance the biodiversity of the region***

Objectives

- to establish a Riverway system in Broome County that will become a continuous wildlife corridor
- to preserve land where appropriate to save riparian communities

Goal 5 - Flood Control

To sensitively reuse lands prone to flooding

Objectives

- to encourage the municipal purchase of flood buyout properties where feasible
- to minimize the intensity of usage on lands prone to flooding

Goal 2 - Economic Development

To stimulate economic revitalization in Broome County's riverfront communities

Objectives

- ◆ to sensitively develop the riverfronts and generate tourism revenue
- ◆ to use riverfront development to revitalize small "downtowns" located nearby
- ◆ to promote opportunities for small business development along the riverfronts

Goal 3 - Community Health

To enhance health and quality of life for all residents and visitors

Objectives

- ◆ to enable residents to improve their physical and mental health through interaction with regional water features
- ◆ to raise the region's quality of life and encourage new residents by offering a diversity of riverfront experience

Goal 6 - Connectivity

To connect communities through their riverfronts

Objectives

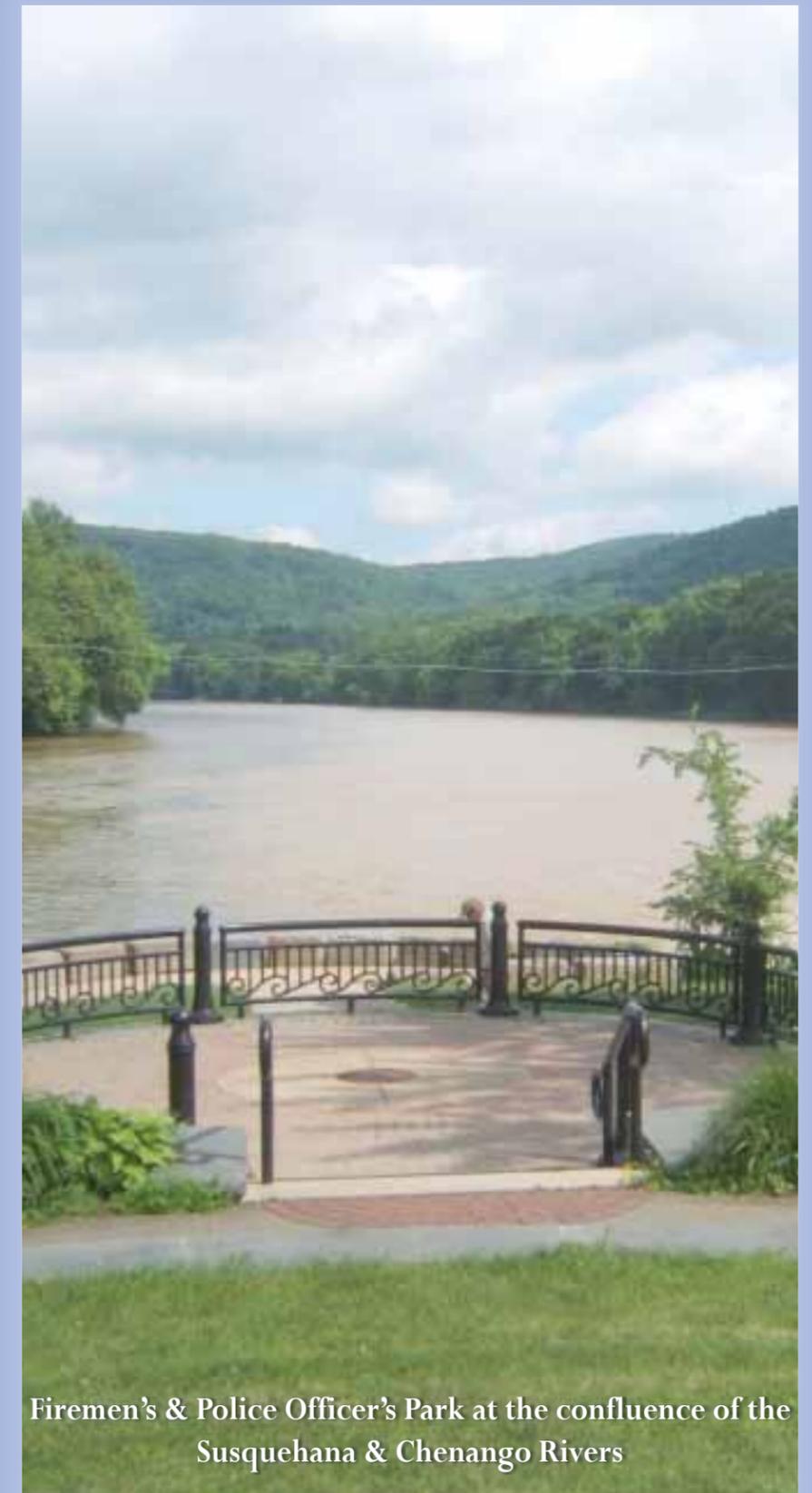
- ◆ to promote active participation of all Broome County riverfront communities
- ◆ to encourage all riverfront communities to embrace regionalism and consider their individual development as part of a larger Riverway corridor

Goal 7 - Transportation

To establish an intermodal transportation system that connects the riverfronts

Objectives:

- ◆ to relieve gaps in the existing trails systems
- ◆ to create multi-modal trails that will accommodate a variety of users
- ◆ to promote alternatives to automobile transportation wherever feasible



Firemen's & Police Officer's Park at the confluence of the Susquehanna & Chenango Rivers

2.3.2 SWOT Analysis

As a part of the public input process, participants were asked to complete a SWOT Analysis. The SWOT Analysis describes the Broome County region's greatest current Strengths, Weaknesses, Opportunities and Threats. The results were taken into consideration as the Plan was developed.

The comments most often cited by community members and local specialists are summarized at right:

STRENGTHS

- ◆ Presence of Binghamton University
- ◆ Rural Area Character
- ◆ Diverse Waterfowl/fish
- ◆ Proximity to New York City – downtown Manhattan in 3 hours
- ◆ Access to Interstate 86
- ◆ Recognition from people in the NYC/downstate area
- ◆ Juncture of the two main rivers is geographically central to the entire county
- ◆ Binghamton demographics – educated, good income
- ◆ Many initiatives already in place – LWRP, Susquehanna Heritage Area Plan, Greater Binghamton Greenway Study
- ◆ Plenty of vacant industrial space
- ◆ Very little development along the riverbanks
- ◆ Proximity of expressways to the water provides spectacular views of the rivers
- ◆ Historic Resources
- ◆ Constant presence of the river whether you can see the water, a wall, etc...
- ◆ Binghamton has a strong architectural history
 - ◆ “like a big Corning”
- ◆ Reasonable cost to build/maintain river access points

WEAKNESSES

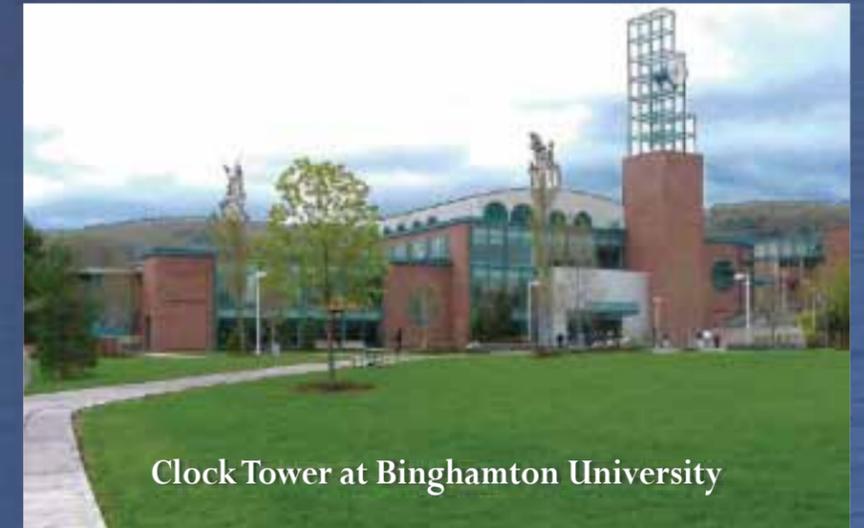
- ◆ Difficult east-west access
- ◆ Aging population
- ◆ Access to rivers is often poor
 - ◆ Even more difficult to bring/carry things to the river
- ◆ Road corridors/expressways are located along the waterways and function as a barrier
- ◆ Flooding
 - ◆ Dykes have created barriers
 - Original character of the waterways has been changed
- ◆ Uncoordinated regulatory process
- ◆ Lack of intermunicipal cooperation between counties
- ◆ Steep shorelines

OPPORTUNITIES

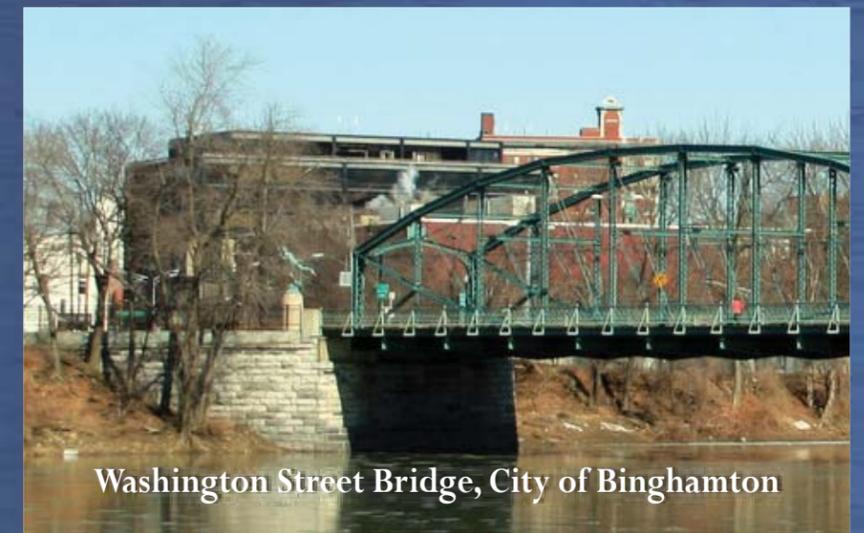
- ◆ Fishing
- ◆ Vestal “Parkway” maybe should be turned into an actual parkway – there is no need for an expressway there
- ◆ Potential Second Home Market
- ◆ Broome County residents typically don’t travel far – interested in hunting, fishing, bargain shopping, sports
- ◆ Ecotourism
- ◆ Marcellus Shale market
- ◆ Pennsylvania visitor fishing market
- ◆ New access can provide river opportunities
- ◆ Potential for county-wide LWRP – which will make them eligible for grant monies
- ◆ Completed Plan creates eligibility for grant funding

THREATS

- ◆ Economic market
- ◆ Flooding
- ◆ Lack of Access
- ◆ Potentially unstable shorelines
 - ◆ Threat of erosion due to shale base
- ◆ Ability of a certain municipality to be able to...
 - ◆ Take advantage of funding opportunities
 - ◆ Maintain improvements
- ◆ Smaller municipalities do not have the budget and personnel to undertake new initiatives
- ◆ Environmental implications of “fracking” – many unknowns



Clock Tower at Binghamton University



Washington Street Bridge, City of Binghamton



Images from Google Earth

Vestal Parkway during the Flood of 2006

2.4 Riverfront Character Areas

The character of Broome County riverfronts varies greatly from community to community. Carved by retreating glaciers, wide valleys in the east and north accentuate rolling terrain and gentle hills. In sharp contrast, the more dramatic eastern landscape becomes increasingly rugged as the elevations rise on approach to the Catskill Mountains. This topographic diversity provides inspiring views and vistas. The presence of the rivers serves as a constant defining characteristic of the region.

For the purpose of clearly defining riverfront character, the corridors of the Tioughnioga, Susquehanna, Chenango and Delaware rivers are divided into six different character areas. Their identification draws from the landscape qualities of each area and the primary cultural use of the rivers and adjacent lands.

Character areas are intended to serve as a guide for communities as they select and champion riverfront development projects. Each individual project should thematically reflect the overall character area in which it resides. Descriptions of the six character areas are defined below:

2.4.1 *The Urban Confluence*

The City of Binghamton is prominently positioned at the confluence of the Susquehanna and Chenango Rivers. First established as Chenango Point in 1802, the settlement evolved over time into a manufacturing hub due its relationship to the rivers and its locations as a transportation crossroads. By the late 19th century and into the next, Binghamton emerged as a thriving and vital urban center. An abundance of good jobs and the potential for prosperity led to the city becoming known as the “Valley of Opportunity”. By the middle of the 20th century, the population of the Binghamton had grown to almost 100,000 as the city became the seat of government for Broome County, and a cultural and educational center. The character of the Binghamton riverfront is diverse and is comprised primarily of urban development mixed with treed edges, green spaces, and pedestrian promenades and trailways.

2.4.2 *The Valley Tributaries*

The Valley Tributaries character area is defined by contiguous valley lands of varying width that emphasize the presence of the Tioughnioga and Chenango rivers. The rolling topography provides a backdrop and is enhanced with lowlands that swell and retract from the river’s edge. Agricultural lands extend across some of the lowlands and sweep up the many hillsides. Recreation opportunities are abundant in the area with opportunities concentrated at Chenango Valley State Park. Views throughout the area are diverse and offer a variety of landscape experiences.

2.4.3 *The Agricultural Reaches*

The Agricultural Reaches character area is defined by patterns of farmland and fallow land that create a unique landscape mosaic in a natural landscape setting. The comparatively narrow band of tableland from the water’s edge to the base of the nearby hills, creates a strong visual and physical connection to the river. The Village of Windsor, with a history dating back to the American Revolutionary War, is the commercial center of the character.

2.4.4 *The Rural Waterway*

The Rural Waterway character area exhibits a countryside character that follows the winding form of the Susquehanna River. Development is rural in character, intermittent, and consists primarily of mixed uses on large lots. Viewed windows to the water are defined by natural wooded areas along the river’s edge.

2.4.5 *The Working Waterway*

The Working Waterway is defined by a suburban pattern of development that integrates a variety of mixed land uses, including residential, commercial and industrial. Most development occurs in a linear manner along the Vestal Parkway. Much of the river’s edge is treed with occasional points of access. The water depth in this section of the Susquehanna accommodates more active use of the river. Sections of the river are dammed, which limits the extent of boating on the river.

2.4.6 *The Sporting Waterway*

The Sporting Waterway character areas (there are two) are considered primary outdoors recreation areas. The Tioughnioga River and Whitney Point Reservoir character area is both a recreation and outdoor sportsman destination. The reservoir supports recreational boating and fishing. Canoe outfitters on the Tioughnioga River provide a service for the tourists and locals. The character of the area is that of a more natural countryside.

The West Branch of the Delaware River character area is an evolving destination for fisherman, hunters and other similar outdoor sportsmen and enthusiasts. The emerging tourism industry is supported with high quality rental lodge, cabins and outfitters. The landscape character of the area is defined by the Delaware River that is contained within the narrow valley lands by the adjacent hills, which are higher in elevation than those to the west. The Village of Deposit has heritage features/buildings that celebrate the history of the area.

Figure 5 - Character Areas (right)

Source: peter j. smith & company, inc.
peter j. smith & company, inc.

CHARACTER AREAS



- THE URBAN CONFLUENCE
- THE WORKING WATERWAY
- THE RURAL WATERWAY
- THE VALLEY TRIBUTARIES
- THE AGRICULTURAL REACHES
- THE SPORTING WATERWAY

THE SPORTING WATERWAY

- ELEVATED VIEWS OF VALLEYLANDS
- LAKE RELATED RECREATION ACTIVITIES
- FISHING, HUNTING, BOATING

THE VALLEY TRIBUTARIES

- WIDE / NARROW VALLEYS
- AGRICULTURAL LANDS
- EXPANSIVE OPEN SPACE
- NORTH/SOUTH TRANSPORTATION CORRIDOR
- GLACIAL REMNANTS

THE URBAN CONFLUENCE

- CULTURAL/COMMERCIAL CENTER
- NATURAL / MANMADE RIVER EDGE
- URBAN DEVELOPMENT OVERLOOKS RIVERS
- GLACIAL REMNANTS

THE AGRICULTURAL REACHES

- NARROW VALLEY
- AGRICULTURAL LANDS
- RURAL CHARACTER

THE SPORTING WATERWAY

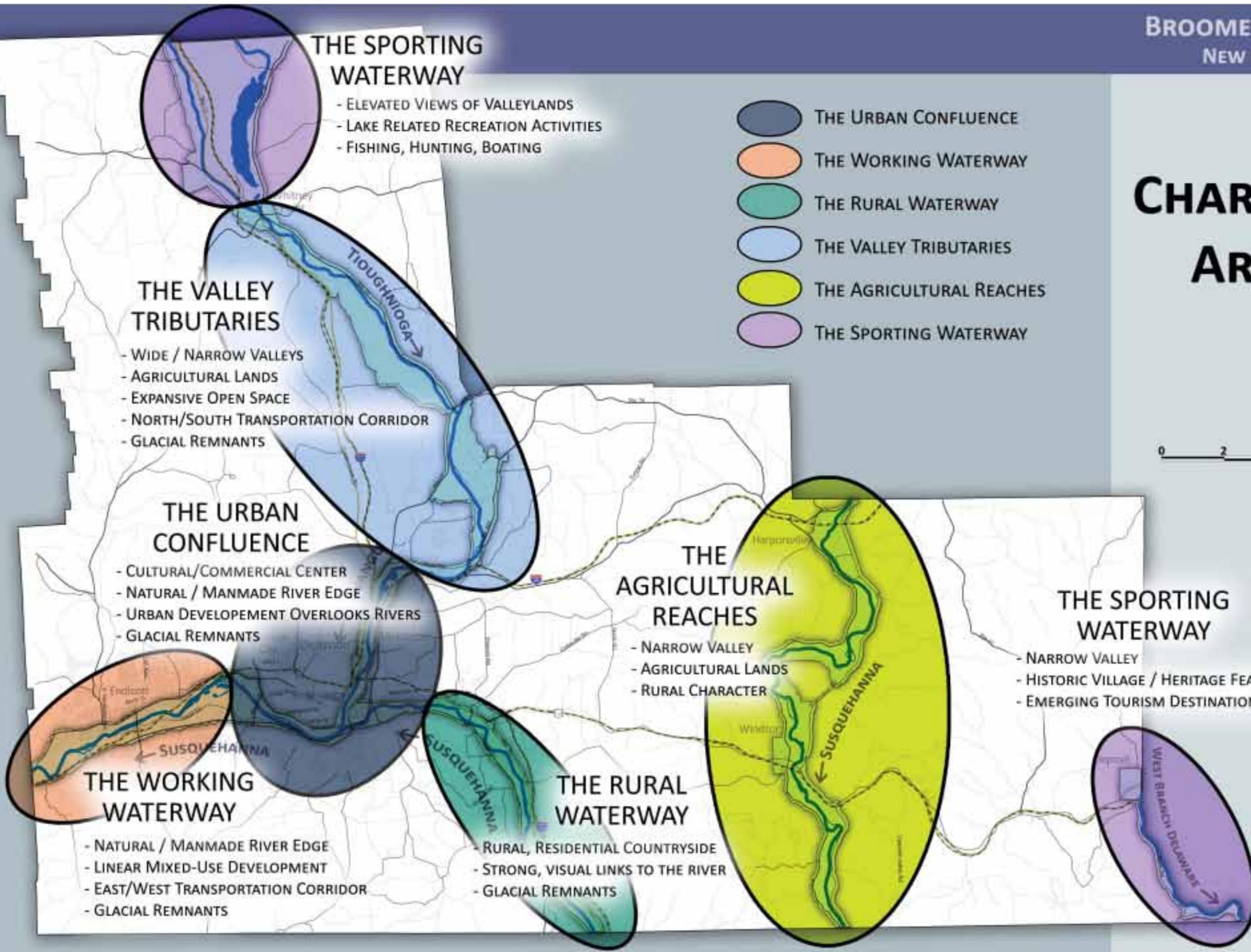
- NARROW VALLEY
- HISTORIC VILLAGE / HERITAGE FEATURES
- EMERGING TOURISM DESTINATION

THE WORKING WATERWAY

- NATURAL / MANMADE RIVER EDGE
- LINEAR MIXED-USE DEVELOPMENT
- EAST/WEST TRANSPORTATION CORRIDOR
- GLACIAL REMNANTS

THE RURAL WATERWAY

- RURAL, RESIDENTIAL COUNTRYSIDE
- STRONG, VISUAL LINKS TO THE RIVER
- GLACIAL REMNANTS



THIS MAP WAS PREPARED FOR THE NYSDOS WITH FUNDS PROVIDED UNDER TITLE 23 OF THE ENVIRONMENTAL PROTECTION FUND.

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3 Priority Waterfront Access Projects

There are a wide range of physical projects proposed for the Broome County riverfronts that will enhance the quality of life of residents and contribute to regional economic growth. Projects provide improved access, create recreational opportunities, and encourage an appreciation of the rivers of Broome County. This is only a beginning list of riverfront projects. In the future, additional projects that fall under the scope of this Broome County Intermunicipal Waterfront Study may be incorporated as they become known. Types of projects include:

- ◆ Boat Launches – this includes both hand carry launches and boat launch ramps
- ◆ Riverfront Park Improvements – includes improvements to existing parks and new parks
- ◆ Fishing Access – provides simple access to the river requiring minimal construction
- ◆ Interpretive Sites – these will inform visitors of a variety of site-specific topics
- ◆ Trails – both developed trails and less developed pathways (also inclusive to water-based recreational trails)
- ◆ Scenic Overlooks – simple roadside pull-offs where river views can be appreciated
- ◆ Signage – includes both interpretive and directional signage
- ◆ Environmental – projects whose main objective is improvement of the environment

Each project has a brief description and an aerial or photo associated with it. At this time there are no projects that fall under the Environmental category.

3.1 Boat Launches

Public access for boats to the waters of Broome County is among the most fundamental waterfront needs. For a modest investment, a new boat launch will both make it apparent that a section of river can be boated, that it is convenient to do so and will greatly increase the opportunity for people to get out and enjoy the scenic rivers of Broome County. By locating launch sites where there are currently none, the rivers of Broome County can be accessible to boaters in their entirety.

To guide the design of boat launches and ensure that all facilities are accessible for people with disabilities, the New York State Department of Environmental Conservation (NYS DEC) publishes the '*A.D.A. Accessibility Standards for Outdoor Recreational Facilities*'. The National Park Service also publishes an excellent reference for the design of boat launches titled '*Logical Lasting Launches*' which is available online at: www.nps.gov/ncrc/programs/rtca/helpfultools/launchguide.pdf.

For this report, boat launches are broken into two categories: hand carry boat launches and boat launch ramps. Specific locations where new boat launch ramps would be appropriate or where an existing ramp should be improved are described below and are identified with numbers corresponding to the Boat Launch Sites map at right.

Figure 6 - Recommended Boat Launch Sites (right)

Source: peter j. smith & company, inc.
peter j. smith & company, inc.

BOAT LAUNCH SITES

LEGEND

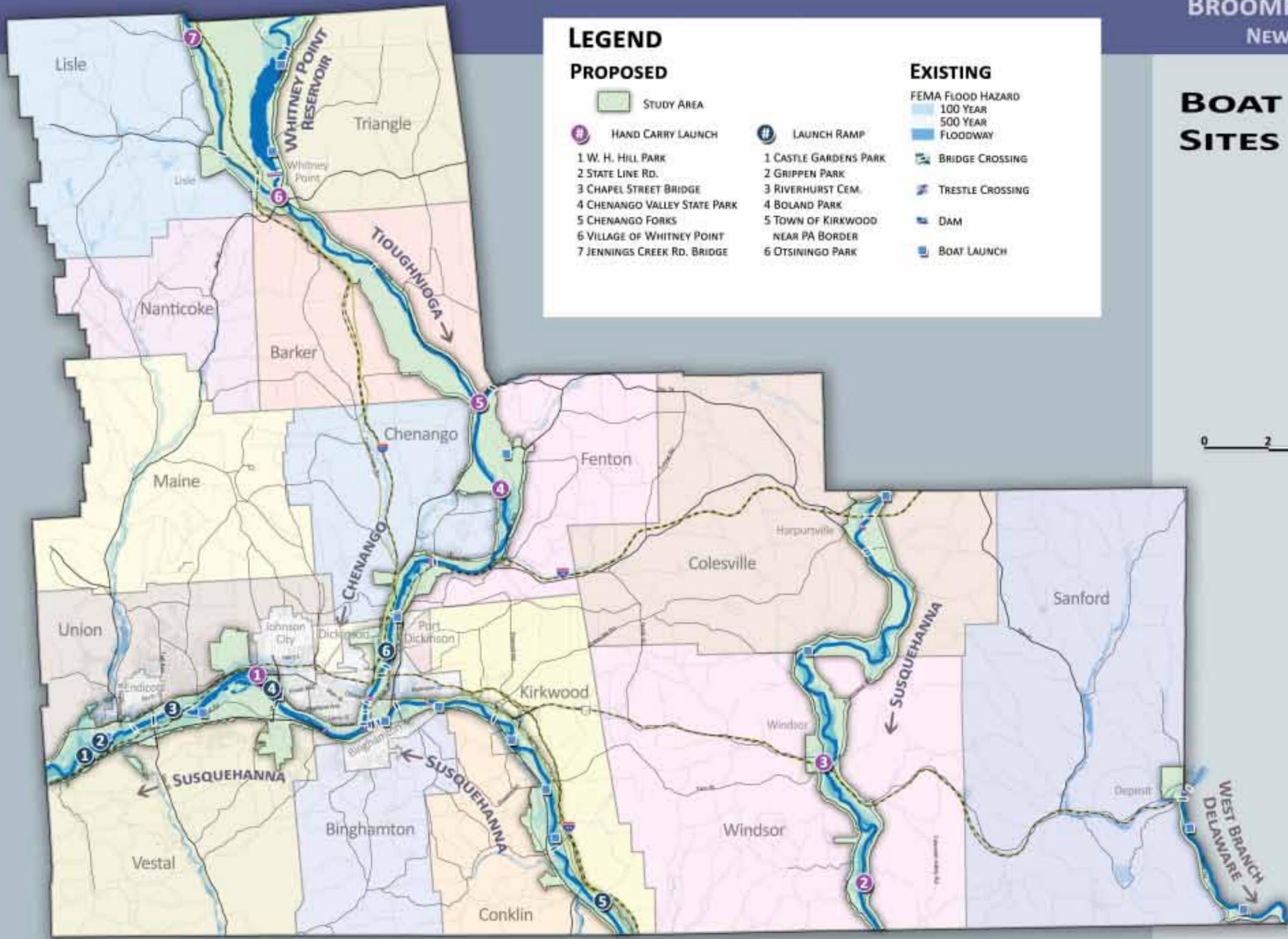
PROPOSED

-  STUDY AREA
-  HAND CARRY LAUNCH
 - 1 W. H. HILL PARK
 - 2 STATE LINE RD.
 - 3 CHAPEL STREET BRIDGE
 - 4 CHENANGO VALLEY STATE PARK
 - 5 CHENANGO FORKS
 - 6 VILLAGE OF WHITNEY POINT
 - 7 JENNINGS CREEK RD. BRIDGE

-  LAUNCH RAMP
 - 1 CASTLE GARDENS PARK
 - 2 GRIPPEN PARK
 - 3 RIVERHURST CEM.
 - 4 BOLAND PARK
 - 5 TOWN OF KIRKWOOD NEAR PA BORDER
 - 6 OTSININGO PARK

EXISTING

-  FEMA FLOOD HAZARD
 - 100 YEAR
 - 500 YEAR
-  FLOODWAY
-  BRIDGE CROSSING
-  TRESTLE CROSSING
-  DAM
-  BOAT LAUNCH



INTERMUNICIPAL WATERFRONT PUBLIC ACCESS PLAN FOR THE COMMUNITIES OF THE CHENANGO, DELAWARE, SUSQUEHANNA & TIOUGHNIOGA RIVERS

THE MAP WAS PREPARED FOR THE NYSDOS WITH FUNDS PROVIDED UNDER TITLE 23 OF THE ENVIRONMENTAL PROTECTION FUND.



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3.1.1 Hand Carry Boat Launches

These are proposed where river waters are often too shallow or rocky for motorized boats to operate safely but are suited to shallow-draft craft such as canoes and kayaks that only require inches of water and can more easily avoid rocks and debris. The term hand carry means that the launch is designed so that the boat must be carried to the launch point – there is no ramp where a trailer can back down to launch a boat. A hand carry boat launch is less expensive than the boat launch ramp requiring at minimum: roadside signage identifying the launch; several parking spaces; a clear, wide path to the water’s edge; and a launch point where the river current is not overly swift. There are two basic types: one where the slope of the riverbank is a sand or fine gravel “beach” that allows boaters to slide a loaded boat into the water perpendicular to the shore. The second, used where the riverbank is steep, consists of a short wall or series of steps that allow boaters to put their craft parallel to the shore, load it, and then push off.

Enhancements of hand carry launches may include a shelter, restroom, picnic tables and/or benches, trash receptacles, signage with river maps, and an overlook. If the launch is to also be used as a take-out point, it is preferable that it be in a visually prominent location so that boaters do not bypass it.

1 Town of Union, William H. Hill Park

Hill Park is on the same side of the Susquehanna River and downstream from the proposed boat launch ramp at Boland Park. However, there is a dam located between them. A hand carry launch area would allow canoers/kayakers ease of access to the several downstream islands in the river.

2 Town of Windsor, east side of Susquehanna River off CR 14 (State Line Road)

This site is currently a roadside pull-off that could be expanded onto the adjacent railroad right-of-way with the consent of the new private owner. While this site does not have optimal site conditions, it provides a strategic location where public river access is limited for many miles in both directions.

3 Village of Windsor, west side of the Susquehanna downstream of the Chapel Street Bridge

This area has good river and bank conditions for a launch site but appears to be privately-owned necessitating a purchase easement. The nearest developed launch is upstream about 5 river miles at Oaquaga Bridge.

4 Town of Fenton in Chenango Valley State Park

There is ample room and good site conditions for a hand carry boat launch site to be developed in relation to the existing Beach Area parking lot at the Chenango Valley State Park.



Hand Carry Launch Site #1: Town of Union at Hill Park



Hand Carry Launch Site #2: Town of Windsor



Hand Carry Launch Site #3: Village of Windsor



Hand Carry Launch Site #4: Town of Fenton

5 Town of Chenango at Chenango Forks

This site, on the west bank of the Tioughnioga River, is an existing access point that is in need of improvements. The site currently consists of parking for six cars with access to the river – the nearest water is a slack-water side channel of the Tioughnioga just upstream from its junction with the Chenango River. This site functions as both a put-in for boating the Chenango and take-out point for boating the Tioughnioga. Improvements may include a developed launch, signage with a river map and some tables.

6 Village of Whitney Point, west bank of the Tioughnioga, upstream of Rte 11 bridge and below junction with the Otselic

This site is just upstream from a well worn ad hoc launch site on the opposite (downstream) side of the Route 11 Bridge, known as River Crossing Park. The proposed launch site has a small side channel that may provide a haven from the current during high water. It appears that the land for the launch would be on roadway right-of-way; however, this should be confirmed. The exact location of the launch and associated parking could be adjusted to anywhere in the vicinity that an easement could be acquired since the riverbank is open and suitable for a launch site for several hundred feet and access from the road would not pose a problem. This location would function mostly as a put-in for boaters on the Tioughnioga below the Otselic but could also act as a take-out for boaters using the upper Tioughnioga from Killawog. A similar project is referenced in the Village of Whitney Point Downtown Strategic Plan, which recommends the creation of a naturalistic linear park along with a cartop boat launch.

7 Hamlet of Killawog in Lisle Township on the west bank of the Tioughnioga just north of the Jennings Creek Road Bridge

This site would act as a put-in for boaters to access the over five-mile stretch of river downstream to Whitney Point.



Hand Carry Launch Site #5: Hamlet of Chenango Forks



Hand Carry Launch Site #6: Village of Whitney Point



Hand Carry Launch Site #7: Hamlet of Killawog

3.1.2 Boat Launch Ramps

This type of launch is proposed to occur where the waters are deep enough that a motorboat can operate safely – usually due to a dam being located downstream. For this reason, all of the boat launch ramps are located on the Susquehanna. This type of launch requires a greater level of development and slightly more cost than the inexpensive hand carry launch. A boat launch ramp requires at minimum: roadside signage identifying the launch; several parking spaces large enough for vehicles with boat trailers; and a concrete ramp extending under the water where trailer can be backed down to float the boat off the trailer and where the river current is not overly swift. Ramps should also include provisions for launching of hand carry boats such as canoes and kayaks. Like hand carry launches, enhancements may include a shelter, restroom, picnic tables and/or benches, trash receptacles, signage with river maps, and an overlook.

1 Town of Vestal at Castle Gardens Park Expansion

Castle Gardens Park is currently a small town-owned park. A substantial expansion onto adjacent town-owned riverside land (see Park Improvements) is in the process of being completed, including a new boat launch ramp. The waters of the Susquehanna are deep, not overly swift in this area and well suited for a ramp. It would provide an alternative to the launch on the opposite (north) bank that is reported to suffer from seasonal low water depth. The nearest launch on the south bank is approximately four miles upstream at Harold Moore Park or approximately four river miles downstream at the Valley View Drive Bridge. A possible shoreline trail should be integrated and parking should be partially screened or broken up to avoid an expanse of paving.

2 Village of Endicott at Grippen Park

This is an existing boat launch ramp site that would benefit the community if it was improved. The site, having minimal amenities, simply consists of a ramp and ten parking spaces. The ramp is in reasonable condition and restrooms are available at the adjacent indoor BMX track. Improvements would increase the amenities for boaters. Possible improvements include an overlook/picnic shelter, interpretive signage, benches, and an accessible fishing platform. Another suggested improvement associated with this site is a boat landing, possibly with picnic facilities, on one of the islands.

3 Village of Endwell (Town of Union) adjacent to Riverhurst Cemetery

A boat launch could be constructed on either side of the cemetery. The site to the east has publicly-owned property used by the Department of Public Works. The property immediately to the east has several parcels that are used by a contractor for storage and would be ideal for a boat launch if acquired. If only the public property is available, some consolidation of the storage could occur, opening space for a public boat launch. Some grading of the bank would be required, but the river appears to be deep and slow in this area making it suitable for a ramp. Alternatively, the site to the west has riverbank suitable for a launch and there are no land ownership questions. There may be some impact to adjacent residents.



Boat Launch Ramp Site #1: Castle Garden Park



Boat Launch Ramp Site #2: Grippen Park



Boat Launch Ramp Site #3:
East / West of Riverhurst Cemetery

4 Village of Johnson City at Boland Park

Along the west edge of Boland Park in-line with the end of Grand Avenue, there is a parking area and riverbank area that, with some tree clearing, could provide river access for a boat launch ramp. Though there is an ad hoc hand carry launch site at the east edge of Boland Park, site conditions are not as suitable as at the west edge. A launch at this location provides access to the river that is otherwise not accessible for boaters since there is a small dam that blocks boat access about a quarter mile downstream and one about two miles upstream.



Boat Launch Ramp Site #4: Boland Park

5 Town of Kirkwood near Pennsylvania Border

Located on private property across from where Gorman Road intersects with VFW Memorial Highway (Route 11), about a half mile from the border on the east bank of the Susquehanna River, is an existing river access point. The owner has expressed interest in development on the land (potentially a campground facility) and allowing public access to the river. The owner is open to the possibility of locating a public boat ramp at the site.



Boat Launch Ramp Site #5: Kirkwood near PA border

6 Town of Dickinson at Otsiningo Park

This would be the only public boat launch facility located on the west bank of the Chenango River in Broome County. (Note: Wilfley Community Park in the Village of Port Dickinson has an existing boat ramp located on the east bank of the Chenango River.) It would have ease of access being located in the existing Otsiningo County Park. A possible placement would be opposite from the Otsiningo Community Gardens site, building off of the existing parking lot.



Boat Launch Ramp Site #6: Otsiningo County Park

3.2 Riverside Park Improvements

Having quality waterfront parks in Broome County will provide several quality of life benefits to Broome County residents including:

- ◆ creating recreational opportunities along, and associated with, the rivers
- ◆ improving awareness and appreciation of the rivers and the resources they provide
- ◆ encouraging other types of use such as boating, birding, fishing, etc.

There are numerous riverside parks in Broome County that are in need of upgrades and there are communities that would like to create new riverside parks.

Specific locations for riverside park improvements are described on the following pages and are identified with numbers corresponding to the Riverside Park Improvements map at right.

1 Town of Vestal, Castle Gardens Park

This project, currently in development, is a significant expansion of a small neighborhood park onto adjacent town-owned land creating a greatly improved regional park. The expansion property is approximately 40-acres with approximately 1,600 feet of shoreline on the south bank of the Susquehanna. The site has a large pond with good quality, deep water. Improvements that are being considered include several pavilions, a boat launch ramp (described previously), fishing access and a riverfront trail.

2 Village of Endicott, Roundtop Park

True to its namesake, Roundtop Park is an existing park that sits atop a prominent circular hill offering expansive views of the Susquehanna River valley. While the park already contains a restroom, playground and picnic shelter, the potential to capitalize on the views is not fully realized. Improvements could include a viewing platform with interpretive signage, additional shelters and seating areas that are focused on the commanding view of the river valley, and selective tree pruning to enhance views.

3 Village of Endicott, Mersereau Park

Located on the north bank of the Susquehanna, Mersereau Park has sports fields and a playground. It's views of the river are obscured by grass-covered flood berms. Recent park enhancements are two new ball field backstops, two new playground units, a picnic pavilion, and off-street parking. Future improvements could include a river trail on top of the flood berms and renovation of a vacant gas station restroom for park use.

4 Town of Vestal, Turtle Tower Park

This property is a large expanse of naturalized wetland owned by NYS DOT adjacent to the Routes 17 and 26 cloverleaf interchange. It is known as Turtle Tower Park since there is a wetland observation tower along the east edge that allows visitors to see wildlife – commonly snapping turtles. Improvements should not alter the natural character but allow visitors access to trails and boardwalks through wet areas that are currently too thick to easily venture into. A developed entrance, parking, and interpretive signage should also be included.



Riverside Park Improvement Site #1: Castle Garden Park



Riverside Park Improvement Site #2: Roundtop Park



Riverside Park Improvement Site #3: Mersereau Park

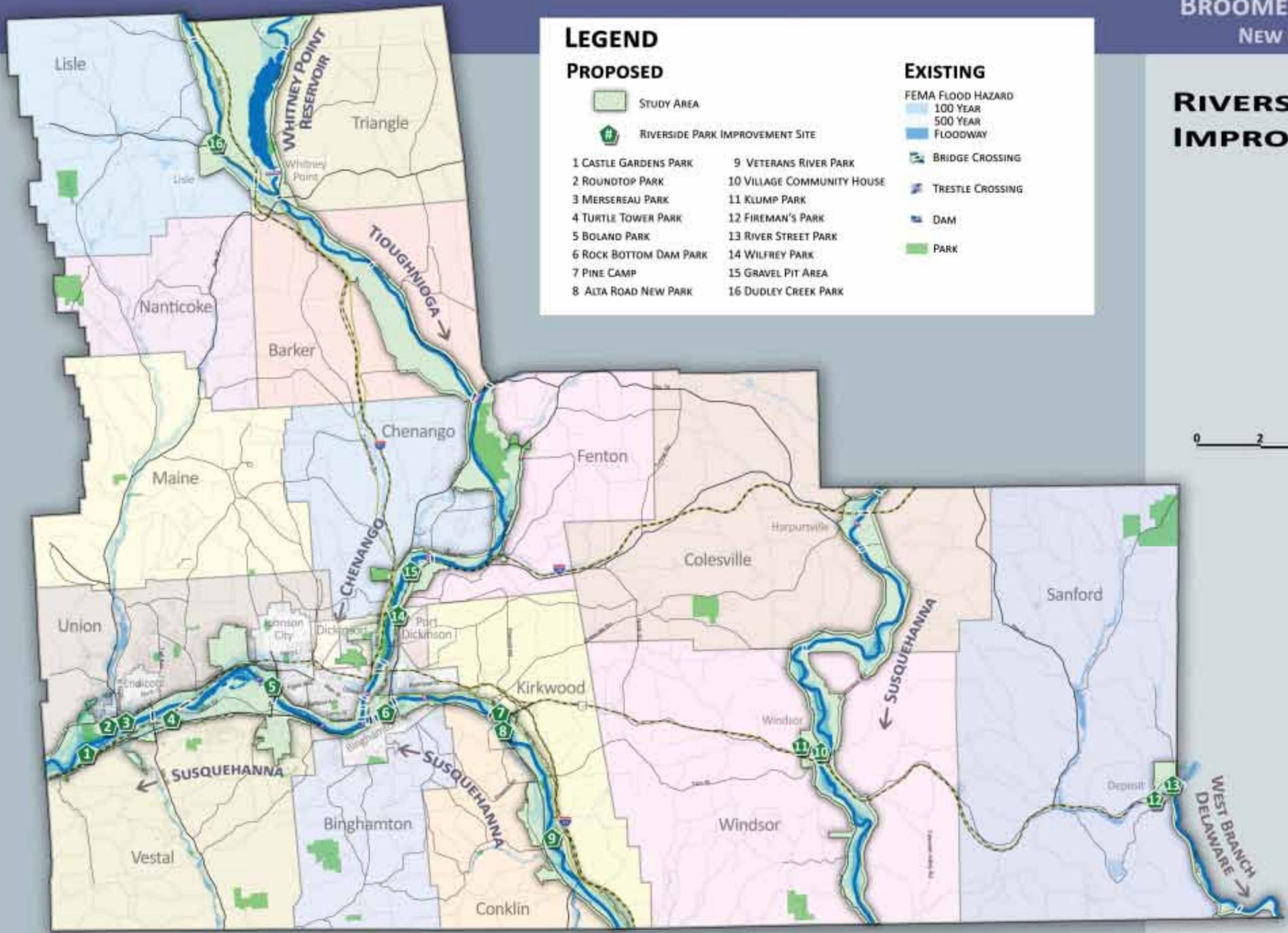


Riverside Park Improvement Site #4: Turtle Tower Park

Figure 7 - Recommended Riverside Park Improvements (right)

Source: peter j. smith & company, inc.

RIVERSIDE PARK IMPROVEMENTS



LEGEND

PROPOSED		EXISTING	
	STUDY AREA		FEMA FLOOD HAZARD
	RIVERSIDE PARK IMPROVEMENT SITE		100 YEAR
			500 YEAR
			FLOODWAY
1	CASTLE GARDENS PARK		BRIDGE CROSSING
2	ROUNDTOP PARK		TRESTLE CROSSING
3	MERSEREAU PARK		DAM
4	TURTLE TOWER PARK		PARK
5	BOLAND PARK		
6	ROCK BOTTOM DAM PARK		
7	PINE CAMP		
8	ALTA ROAD NEW PARK		
9	VETERANS RIVER PARK		
10	VILLAGE COMMUNITY HOUSE		
11	KLUMP PARK		
12	FIREMAN'S PARK		
13	RIVER STREET PARK		
14	WILFREY PARK		
15	GRAVEL PIT AREA		
16	DUDLEY CREEK PARK		



INTERMUNICIPAL WATERFRONT PUBLIC ACCESS PLAN FOR THE COMMUNITIES OF THE CHENANGO, DELAWARE, SUSQUEHANNA & TIOUGHNIOGA RIVERS

THE MAP WAS PREPARED FOR THE NYSDOS WITH FUNDS PROVIDED UNDER TITLE 23 OF THE ENVIRONMENTAL PROTECTION FUND.

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 BROOME COUNTY, NEW YORK 13820

5 Johnson City, Boland Park

The existing Boland Park includes the basic elements of a local park but could benefit from improved play areas, picnic facilities and landscaping. The connection with the river could be greatly improved by adding pathways through the mass of riverside vegetation to an overlook and proposed boat launch.

6 City of Binghamton, Rock Bottom Dam Park

This is a minimally developed park site that is being proposed for upgrades associated with a Whitewater Kayak Park, which would alter the existing dam to create a whitewater channel. Park upgrades may consist of defined parking, a viewing deck, interpretive panels, enhanced launch and landscaping. Improvements should be coordinated with the Susquehanna River Basin Commission, the federal government, and state agencies who are working to remove obstacles to the movement of migratory and indigenous fishes.

7 Town of Kirkwood, Pine Camp

This is a piece of state-owned riverfront property adjacent to a series of industrial buildings. This site is not developed or signed for public access. Improvements would include clear directional signage, picnic facilities, an accessible fishing platform, and interpretive signage. Due to its historical significance (its connection with the New York State Inebriate Asylum), any site development would need to adhere to the Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings by the US Department of the Interior.

8 Town of Conklin, Alta Road New Park

This is a proposed park site that would include nature trails, a pavilion, picnic facilities and a boat launch. It would be built in association with a soccer park between River Boulevard and Lawrence Ave.



Riverside Park Improvement Site #5: Boland Park



Riverside Park Improvement Site #6: Rock Bottom Dam Park



Riverside Park Improvement Site #7: Pine Camp



Riverside Park Improvement Site #8: Alta Road

9 Town of Kirkwood, Veterans River Park

As an existing facility, this park contains ball fields, tennis courts, soccer fields, a playground, pavilions, a boat ramp, a trail and ample parking. Improvements could include a fishing platform / overlook and a trail with interpretive signs along the water's edge.

10 Village of Windsor, Village Community House

This existing Village Park would benefit by moving the existing monument to the street and making a parking lot behind memorial near the community center. Additional improvements could include improved play areas and picnic facilities.

11 Village of Windsor, Klump Park

Enhancements to the park would include connecting pedestrian access to /from Main Street via Occanum Creek bank that runs beside the park and Elm Street. Additional enhancements that are desired include creating picnic areas and augmenting the existing playground equipment.

12 Village of Deposit, Fireman's Park

This nine-acre park, built by the village's firemen on privately-owned land, is open for public use. Currently, it has some ball fields and basic facilities, but could greatly benefit from improvements. Landscaping and improved play areas and picnic shelters of various sizes would enhance the park's appearance and usability. Improved directional signage and roadway would increase awareness of the park, further increasing use. Interpretive signage could describe Borden's Condensery (later Agway) that once occupied the site to the west, where the smokestack is still today.



Riverside Park Improvement Site #9: Veterans River Park



Riverside Park Improvement Site #10:
Village Community House



Riverside Park Improvement Site #11: Klump Park



Riverside Park Improvement Site #12: Fireman's Park

13 Village of Deposit, River Street Park

This narrow property between River Street and the West Branch of the Delaware River is owned by FEMA. The village is in the process of acquiring the land and developing a passive park. Considerations include a gravel parking area; river access for waders, canoes and kayaks; a simple, open structure for hosting events; and a downstream trail connection 8 to the proposed fishing access site along Oquaga Creek 2.

14 Village of Port Dickinson, Wilfrey Park

Situated along the east bank of the Chenango River, this park serves many residents because of its strategic location and is in need of repairs and improvements to better manage the demand. The playground equipment was recently removed due to safety issues. There is no running water in the restrooms or sufficient drinking water opportunities for users of the ball fields and tennis courts. The walking trails need repaving. Upgrades to the small picnic shelter/pavilion would allow expanded use by community musical groups. The park would benefit from additional boating and fishing facilities. Additional on-site parking is also needed.

15 Town of Fenton, Gravel Pit Area

The gravel pit area is privately-owned but not currently active. Because of its size, amount of shoreline, large pond, and proximity to a large population, the site presents an opportunity for the creation of a regional waterfront park. The acreage available would allow the creation of both a developed area with picnic facilities and sports fields and a naturalized area with nature trails. There is also an opportunity to develop the pond for recreational fishing.

15 Town of Lisle, Dudley Creek Park

Located just outside of the village, there is a piece of open property adjacent to the Lisle Fire Company that can be developed into a municipal park. It could include some of the basic elements of a municipal park such as a play area, picnic facilities and sports facilities such as basketball and softball or tee ball.



Riverside Park Improvement Site #13: River Street Park



Riverside Park Improvement Site #14: Wilfrey Park



Riverside Park Improvement Site #15:
Fenton Gravel Mine Area



Riverside Park Improvement Site #16: Dudley Creek

3.3 Fishing Access

Providing fishing access sites can be one of the most cost-effective types of waterfront improvements. Anglers require very little in the way of infrastructure; a parking area and safe access to an area with good fishing will suffice. In addition anglers generally prefer to avoid large crowds, so a fishing access site usually does not need to be large (usually parking for less than ten vehicles). An enhanced fishing access site may include rustic picnic tables and a kiosk for posting of notices such as local regulations or warnings regarding invasive species. These sites are not necessarily limited to fishing access and could include public recreational activities as well.

Specific locations for fishing access improvements are described at right and are identified with numbers corresponding to the map of Fishing Access Sites also at right.

1 Village of Deposit at Mill Street along Creek

This undeveloped site, currently in private ownership, is adjacent to the downtown area of Deposit. There is a directional sign on Mill Street, but no other obvious signage off of Scott Center Road. Access is to the Oquaga Creek, which flows into the nearby West Branch of the Delaware River. The village should acquire the property and make improvements, including a parking area and trail access to the creek.

2 Village of Deposit at River Street

This property, between River Street and the West Branch of the Delaware River, is being acquired from FEMA by the village for use as a park ¹³. The bank has mixed vegetation with mowed grass and tall brush areas. Roadside parking/fishing access should be sited (potentially at the end of Front Street) to minimize the impact to surrounding residents. Consideration should be given for a fishing pier or dock for fishing and for residents' /tourists' enjoyment of the river views.

3 Town of Chenango, Route 12A Park & Ride

New signage and a gravel trail would formalize the existing ad hoc access to the north bank of the Chenango River from the existing parking lot. A dirt road exists from the parking area to the river bank and bridge.

4 Village of Whitney Point at Junction of Tioughnioga & Otselic Rivers

A parking area could be located north of the Routes 79 / 11 bridge over the Tioughnioga River on the east side of the road, which would replace the existing ad hoc access south of the Route 79 Bridge. A trail is needed to allow access to the river banks.

5 Village of Whitney Point, adjacent to I-81,

Develop parking area and trail to access the east bank of the Tioughnioga River on the triangular shaped land on the east side of I-81, opposite the I-81 ramp from Routes 79 / 11. Parking area would be located close to the road. Because a curb cut across from the interstate ramp is prohibited, an agreement/easement will be required from an adjoining property owner.



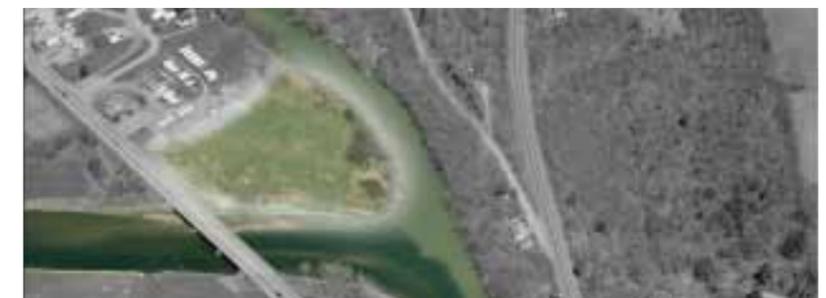
Fishing Access Site #1: DEC Access off of Scott Center Road



Fishing Access Site #2: River Street



Fishing Access Site #3: Route 12A Spur Park & Ride



Fishing Access Site #4: Confluence of Tioughnioga & Otselic



Fishing Access Site #5: Off Route 79/11 east of I-81

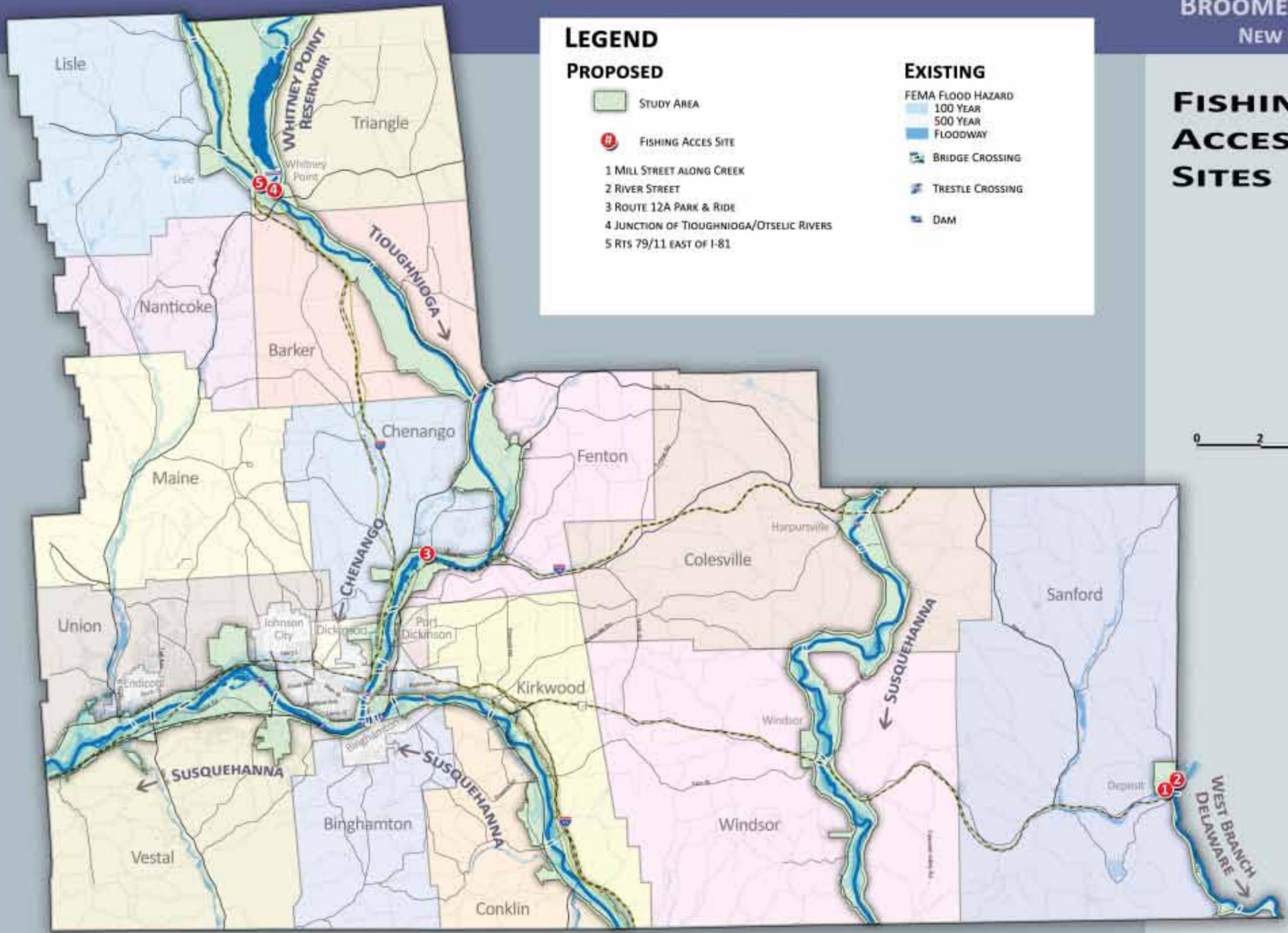
Figure 8 - Recommended Fish Access Sites (right)

Source: peter j. smith & company, inc.

FISHING ACCESS SITES

LEGEND

PROPOSED	EXISTING
STUDY AREA	FEMA FLOOD HAZARD 100 YEAR
FISHING ACCES SITE	FEMA FLOOD HAZARD 500 YEAR
1 MILL STREET ALONG CREEK	FLOODWAY
2 RIVER STREET	BRIDGE CROSSING
3 ROUTE 12A PARK & RIDE	TRESTLE CROSSING
4 JUNCTION OF TIOUGHNIOGA/DTSELIC RIVERS	DAM
5 RTS 79/11 EAST OF I-81	



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 BINGHAMTON, NY 13902

3.4 Trail-related Projects

The categories of trail-related projects include:

- ◆ Trails
- ◆ Pathways
- ◆ Trailheads

These projects are described on the following pages and are identified with numbers corresponding to the map of Trails, Pathways and Trailheads at right. On individual project graphics, the location of the trail/pathway is indicated with either a yellow or orange color: yellow denotes an existing facility while orange denotes a new facility.

3.4.1 Trails

Trails are generally hard paved paths for multiple user types such as pedestrians, bicyclists, skaters, etc. Trails generally conform to published standards such as the American Association of State Highway Traffic Officials (AASHTO) Guide to the Development of Bicycle Facilities and the New York State Department of Transportation (NYS DOT) Highway Design Manual, Chapter 17 Bicycle Facility Design. However, branches and spurs off the main trails may be designed specifically for pedestrians with reduced widths and soft surfaces. For more details about these trails, refer to The Binghamton Metropolitan Greenway Study (1999).

Trails

1 Town of Vestal Rail Trail Extension

This proposed trail is to connect the recently constructed Vestal Rail Trail with the proposed Castle Gardens Park site 1. The trail would be a combination of off and on road sections. Connection would be made via Stage Road and N. Main Street under Route 17. From here, the proposed trail is to be located between Route 17 and the Susquehanna River. The trail would also link with the proposed overlook off of the westbound Route 17 1 (see page 32). At the County border, the trail would loop around back onto itself, at the bow in the river, as well as tying-into the proposed Route I-86 Trail. The total length of trail is about four miles.

2 Vestal, Union, Endicott: The Big Loop

A series of proposed trails, combined with the existing Vestal Rail and Chugnut Trails, would create a long loop system around the Susquehanna River. River crossings are to occur at the Old Lackawanna Railroad Bridge to the east and at Bridge Street to the west. North of the river along this 'big loop', the trail would traverse through William H. Hill Park, an abandoned railroad underpass under Route 17C and Riverview Park. The spur trail to the west would connect Route 17C Sports Facility and Glendale Park to the riverfront along Tri-Cities Airport, Grippen Park, Mersereau Park and Roundtop Park. In addition, there is to be a 3.5 mile loop trail around the airport. South of the river, a section of trail would connect the Vestal Rail Trail with the Lackawanna RR Bridge and the proposed Little Loop Trail 3. The trail would also connect to the proposed Vestal Trail Extension 1. In all, the system encompasses over 14 miles of trails.

3 Vestal, Johnson City, Binghamton: The Little Loop

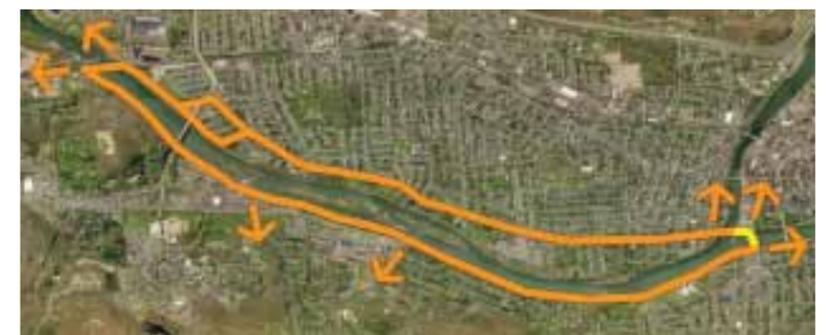
These trails also create another ring circulation system around the Susquehanna River. River crossings are at the Old Lackawanna Railroad Bridge at the west, where it would connect with the proposed Big Loop, and at the South Washington Street Bridge at the east. Here it meets with the proposed Big Bend Trail 6 and the North Loop Trail 9. The 'little loop' includes roughly nine miles of trails.



Trail #1: Extension of Town of Vestal Rail Trail



Trail #2: The Big Loop

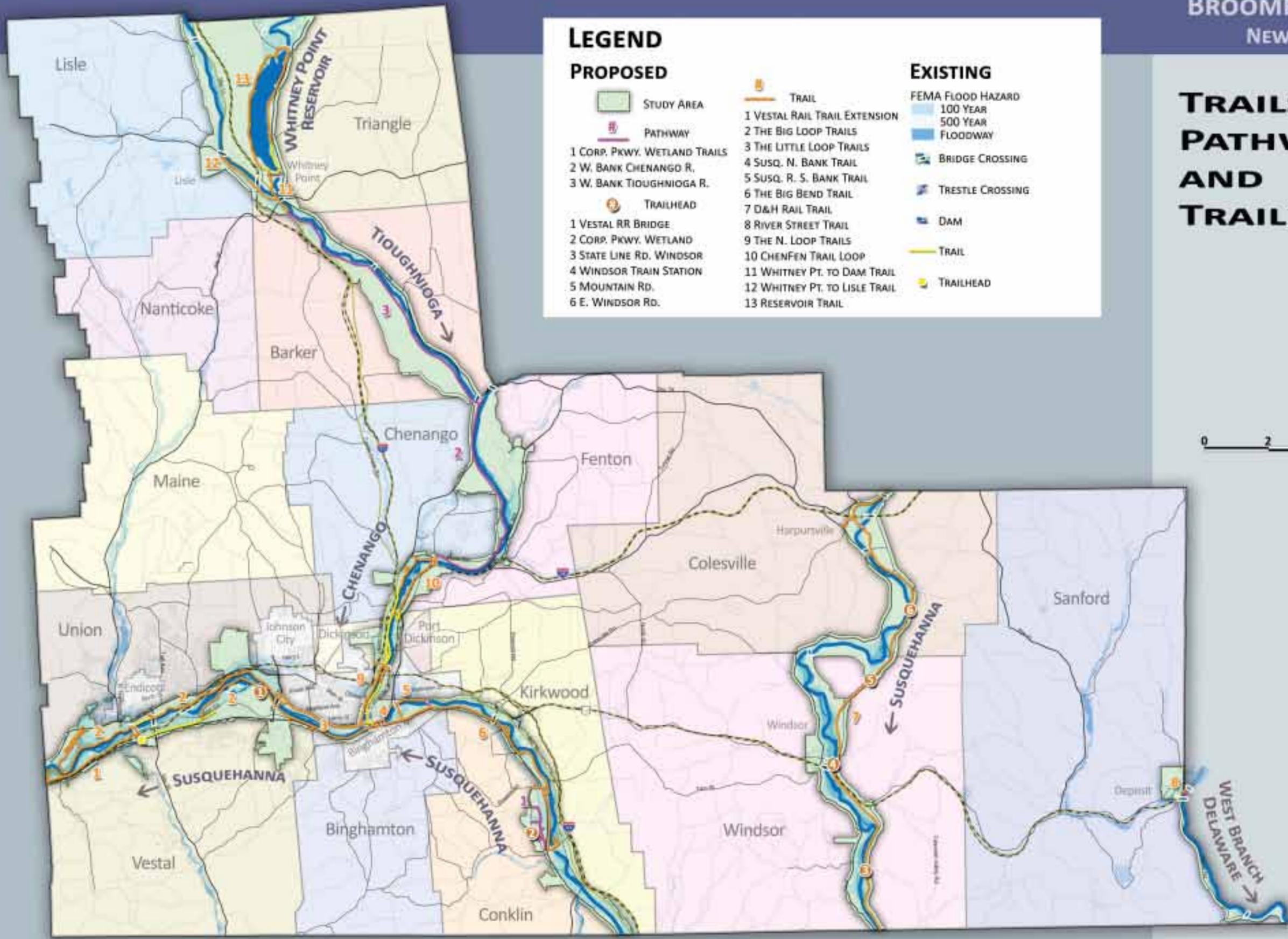


Trail #3: The Little Loop

Figure 9 - Recommended Trails, Pathways & Trailheads (right)

Source: peter j. smith & company, inc.

TRAILS, PATHWAYS, AND TRAILHEADS



LEGEND

PROPOSED		EXISTING	
	STUDY AREA		TRAIL
	PATHWAY		FEMA FLOOD HAZARD
1 CORP. PKWY. WETLAND TRAILS			100 YEAR
2 W. BANK CHENANGO R.			500 YEAR
3 W. BANK TIOUGHNIOGA R.			FLOODWAY
	TRAILHEAD		BRIDGE CROSSING
1 VESTAL RR BRIDGE			TRESTLE CROSSING
2 CORP. PKWY. WETLAND			DAM
3 STATE LINE RD. WINDSOR			TRAIL
4 WINDSOR TRAIN STATION			TRAILHEAD
5 MOUNTAIN RD.			
6 E. WINDSOR RD.			
			1 VESTAL RAIL TRAIL EXTENSION
			2 THE BIG LOOP TRAILS
			3 THE LITTLE LOOP TRAILS
			4 SUSQ. N. BANK TRAIL
			5 SUSQ. R. S. BANK TRAIL
			6 THE BIG BEND TRAIL
			7 D&H RAIL TRAIL
			8 RIVER STREET TRAIL
			9 THE N. LOOP TRAILS
			10 CHENFEN TRAIL LOOP
			11 WHITNEY PT. TO DAM TRAIL
			12 WHITNEY PT. TO LISLE TRAIL
			13 RESERVOIR TRAIL



INTERMUNICIPAL WATERFRONT PUBLIC ACCESS PLAN FOR THE COMMUNITIES OF THE CHENANGO, DELAWARE, SUSQUEHANNA & TIOUGHNIOGA RIVERS

THE MAP WAS PREPARED FOR THE NYSDOS WITH FUNDS PROVIDED UNDER TITLE 23 OF THE ENVIRONMENTAL PROTECTION FUND.

DESIGN
 Peter J. Smith & Company, Inc.
 1000 STATE STREET, SUITE 200
 BINGHAMTON, NY 13902

4 Binghamton Susquehanna River North Bank Trail

The trail originates at Confluence Park, follows the Susquehanna River north bank to Rock Bottom Dam (site of a proposed whitewater park). The majority of the trail will be between the concrete flood wall and the river. It will pass under State and Exchange Street Bridges and connect to the proposed Little Loop 3, Susquehanna River South Bank 5, Big Bend 6 and North Loop 9 Trails. It will be about a third of a mile long.

5 Binghamton Susquehanna River South Bank Trail

The trail starts at South Washington Street Bridge and ends at Tompkins Street Bridge, traversing public lands. It crosses Memorial Park using the existing sidewalk, skirts behind the flood wall of three businesses near Rock Bottom Dam, and completes along the top of the flood levee. Total trail length is less than two miles.

6 Binghamton, Town of Conklin: The Big Bend Trail

The trail follows Conklin Road from South Washington Street Bridge to the Pennsylvania border, travelling through the communities of Conklin, Conklin Center, and Corbettsville. The majority of the trail is on-road; the remaining is on private residential or industrial land. It links to the proposed Alta Road Park 8, the existing Schnurbush Park trail network, and Veterans River Park in Kirkwood 9 via the Route 20 Bridge. A segment is proposed along Powers Road onto Broome Corporate Parkway, which would connect to the proposed wetlands paths 1. The trail is approximately 11 miles.

7 Harpursville to Pennsylvania Rail Trail

This project converts an abandoned rail line to a trail, connecting to the D&H Rail Trail in Pennsylvania. The Friends of the Susquehanna River Rail-Trail plan to create the first section from Windsor to Pennsylvania. However, much of the rail right-of-way was recently purchased by a private entity. Two spurs will emanate from the trail: one at Centerville's Old Bridge Street structure providing access for residents, and a second into the Village of Harpursville. The trail would traverse the length of the county, covering about 14 miles.



Trail #4: Binghamton North Bank Trail



Trail #5: Binghamton South Bank Trail



Trail #6: The Big Bend Trail



Trail #7: Harpursville to PA Rail Trail

8 Village of Deposit River Street Trail

In conjunction with the proposed River Street Park 13, the village plans to develop a gravel trail from the park to the fishing access site 2 at the mouth of Oquaga Creek next to the sewage treatment plant.

9 Binghamton, Dickinson: The North Loop Trail

Incorporating the existing Promenade, the trail system loops from the Riverside Drive Bridge (mouth of the Chenango River) north to Bevier Street Bridge and back. River crossings would also occur at the Clinton and Court Street Bridges. Sections of the trail would be on-road / sidewalks. Features along the route include the Roberson Museum & Science Center & Visitor Center, Dr. Martin Luther King Memorial Promenade, Center for Technology & Innovation, Cheri Lindsey Memorial Park and Otsiningo Park. The length of this entire system roughly entails five miles.

10 Chenango / Town of Fenton Trail Loop

The Chen-Fen Loop Trail covers the area on both sides of the Chenango River between the 12A Bridge near Chenango Bridge and the Interstate 88 Bridge near Port Dickinson. It would connect with the existing Otsiningo Park Trail (sections to the north and south) and the Chenango River West Bank Pathway 1 on the north end of the trail. From the I-88 Bridge, the trail would travel up the west bank of the river, through Riverfront Park sports fields, the Northgate Plaza, and the residential streets to the park and ride at Route 12A. Consideration should be given to creating a spur trail along Dorman Road to Wolf Park. The east riverbank side of the trail would most likely follow the West Arterial Highway to Wilfley Park unless negotiations can be made with industrial land owners. Total trail length is about six miles.



Trail #8: North Loop Trail



Trail #9: North Loop Trail



Trail #10: Chen-Fen Loop Trail

11 Village of Whitney Point to Existing Trail at Dam

Beginning where the proposed West Bank Tioughnioga River path 2 ends south of the Village of Whitney Point, this trail links with the Village of Lisle Trail 12 and the proposed loop trail at the reservoir 13. It heads north along the river, past Main Street and its commercial area, across the Route 11/79 bridge, and turns right onto River Road where it follows the shoreline of the reservoir outfall. The trail continues past the back of Whitney Point Senior High School and meets with the existing trail at the dam. The journey along the trail from the southern edge of the village to the intersection with the dam trail is approximately one mile.

12 Village of Whitney Point to Village of Lisle Trail

This trail would utilize the corridor between the railroad right-of-way and the Tioughnioga River to connect the villages of Lisle and Whitney Point. At the south end, the trail meets with the ‘Whitney Point to Dam’ Trail 11 at Routes 11/79 near the intersection with Main Street. From here it heads northwest along the top of the flood berm, behind the commercial area of Main Street. It could then continue either along the existing farming access road (illustrated in figure) and/or the west bank of the river. The trail ends at Main Street in the Village of Lisle, just west of the Route 79 Bridge. The trail would be a little over two miles long.

13 Whitney Point Reservoir Trail

Create a trail circuit around the reservoir by tying into the existing trail at the dam. West of the reservoir, the trail begins at Keibel Road where the dam trail ends. The trail continues north (either beside or off the road) to the road’s dead end, approximately two-thirds up the reservoir. At this point the trail continues off road, along the reservoir, to where it meets the road end in the Wildlife Management Area. From here the trail travels to Upper Lisle Road and across the bridge to State Route 26, where it turns south. At this point, the trail may follow State Route 26 or the shoreline of the reservoir to where it meets with the existing trail in Dorchester Park. The south end of the park trail joins with the existing reservoir dam trail, completing the circuit. The circuit is ten miles long.



Trail #11: Whitney Point to Existing Dam Trail



Trail #12: Whitney Point to Lisle Trail



Trail #13: Whitney Point Reservoir Trail

3.4.2 Pathways

Pathways in this context refer to trails that are suitable for pedestrians or mountain bikes. They feature soft surfaces of gravel or native soils. They are generally recreational in nature, rather than transportation features. Pathways generally do not conform to published standards since they can be narrower, rougher, and steeper than typical bike paths. They are intended to fit into a more rural or rustic setting and have less of an impact on the surrounding landscape.

3.4.3 Trailheads

Strictly speaking, trailheads are the start of a trail. In this context, trailheads refer to locations where one can gain access to a trail. They typically offer amenities such as parking, trail user sign-in, trail maps and information, and sometimes even rest rooms. Where possible, trailheads are located at existing destinations, such as parks and recreation areas. All trailheads offer easy access to one or more trails.

Pathways

1 Town of Conklin, Broome Corporate Pkwy Wetland Trails

This proposed series of paths would weave through the wetlands and around the pond in the Broome Corporate Park located along Broome Corporate Parkway. The almost two miles of paths would allow access, but have limited pedestrian enhancements. Consideration should be given to incorporating interpretive signage that could highlight the wetland environment. The paths would link to the Big Bend Trail 6 via Broome Corporate Parkway and Powers Road. Access connections would also be made to the surrounding neighborhoods.

2 Town of Chenango, Chenango River West Bank

This seven mile pathway section connects the proposed Chenango/Fenton Loop Trail with the Tioughnioga River West Bank Pathway. The pathway endings are at the Chenango Bridge on the south and the Village of Whitney Point on the north. Mainly following the west shoreline of the Chenango River, the pathway goes by two proposed sites: the River Road Overlook 7 and the hand carry boat launch on the Tioughnioga River at Chenango Forks 3.

3 Town of Barker, Tioughnioga River West Bank

Continuing northward from the Chenango River Pathway 1 is the proposed Tioughnioga River West Bank Pathway. It runs northward along the shoreline about eight miles, to the Village of Whitney Point. Here it joins up with the trail to the Whitney Point Dam 11.

Trailheads

Town of Vestal at old Railroad Bridge

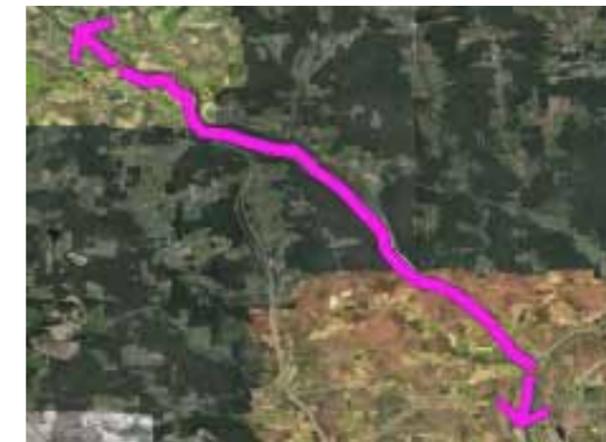
1 Where Gates road ends at the Susquehanna River, north of Vestal Hills Memorial Park, is the potential location of a trailhead. This trailhead would service the proposed trails connecting the existing Vestal Rail Trail 1 & 2 to the border with the City of Binghamton.



Pathway #1: Town of Conklin



Pathway #2: Town of Chenango



Pathway #3: Town of Barker



Trailhead #1: Vestal at Lackawanna Railroad Bridge

2 Town of Conklin, Broome Corporate Pkwy Wetland Trails

Adjacent to the Broome Corporate Parkway, this trailhead acts as the gateway to the proposed wetland trails **1**. It would be associated with a gravel roadside pull-off or parking area.

3 Town of Windsor, east side of Susquehanna River, off CR 14 (State Line Road)

This trailhead would access the proposed Harpursville to Pennsylvania Rail Trail **7**. It is located less than 2 miles from the Pennsylvania border and would be allied with the roadside pull-off that exists there. It would also be associated with the proposed hand carry launch site **1** and scenic overlook **4**.

4 Village of Windsor at Old Train Station

Located on the east side of the village along the abandoned D&H rail line, the train station would serve as a trailhead for the proposed Harpursville to Pennsylvania Rail Trail **7**. At this time, the village has acquired a three-year lease on the train station. The Friends of the Susquehanna River Rail-Trail is also interested in the facility and would like to rehabilitate the building, which has been submitted to the registry of historic places, and potentially have it house a museum and/or bike rental.

5 Mountain Road near East Windsor Road

This trailhead would access the proposed Harpursville to Pennsylvania Rail Trail **7**. It is located about a third of the way from Windsor to Harpursville. It is adjacent to the East Windsor Cemetery and could incorporate interpretive signage regarding this and the local area.

6 Town of Colesville, East Windsor Road south of Thorn Hill Road

This trailhead would access the proposed Harpursville to Pennsylvania Rail Trail **7**. It is located about two thirds of the way from Windsor to Harpursville. At this point the proposed trail is the closest to any road (East Windsor Road), about 25 feet.



Trailhead #2: Town of Conklin



Trailhead #3: Town of Windsor



Trailhead #4: Village of Windsor at train station



Trailhead #5: Mountain Road near East Windsor Road



Trailhead #6: Town of Colesville

3.5 Scenic Overlooks

There are many areas along the roadways in Broome County that offer great vistas. Scenic overlooks take advantage of these areas and offer visitors and residents the opportunity to experience the beautiful scenery and geography of the area. For this context, scenic overlooks are specific to roadside pull-offs, with or without formal parking. They may be associated with trailheads, parks, or other features. They offer no amenities other than informational or interpretive signage, but are not necessarily associated with an interpretive site. They are for the enjoyment of the road traveler and help to promote the area.

Specific locations where new scenic overlooks would be appropriate or where an existing pull-off should be improved are described below and are identified with numbers corresponding to the map of Scenic Overlook Sites at right.

1 Town of Vestal , Proposed Vestal Rail Trail Extension

West of the Castle Garden residential area there is an opportunity to develop a scenic overlook for users of the proposed Vestal Rail Trail extension to Castle Gardens.

2 Johnson City, East of Boland Park

Just northwest of the Route 201 Bridge, off of Boland Drive, on the north bank of the Susquehanna River, is the proposed site of this overlook. There is an ad hoc hand carry boat launch at the proposed site at this time. The overlook is to give views of the river and may include a wooden deck over the water. The proposed Little Loop Trail 3 would connect to this overlook.

3 Binghamton, South Bank at Confluence at Public Works Building

West of the South Washington Street Bridge over the Susquehanna River, along the ramp to the Vestal Parkway at the site of the Public Works Building, there is ample space to provide parking and a scenic overlook. Ideally situated over the water, the overlook would give views up and down the Susquehanna River, with a river view of the South Washington Street Bridge, and views across and up the Chenango River. This overlook would be along the proposed Little Loop Trail 3 .

4 Town of Windsor, east side of Susquehanna River off CR 14 (State Line Road)

This scenic overlook would provide views of the Susquehanna River and the proposed Harpursville to Pennsylvania Rail Trail. An existing non-paved pull-off from State Line Road currently exists just south of Atwell Hill Road. Vegetation would need to be cleared to open up views. It would be allied with the proposed hand carry launch site 1 and trailhead 2 .



Scenic Overlook #1: Along Trail west of Castle Gardens



Scenic Overlook #2: East of Boland Park



Scenic Overlook #3: South Bank at Confluence



Scenic Overlook #4: State Line Road near Atwell Hill

Figure 10 - Recommended Scenic Overlook Sites (right)

Source: peter j. smith & company, inc.

SCENIC OVERLOOK SITES

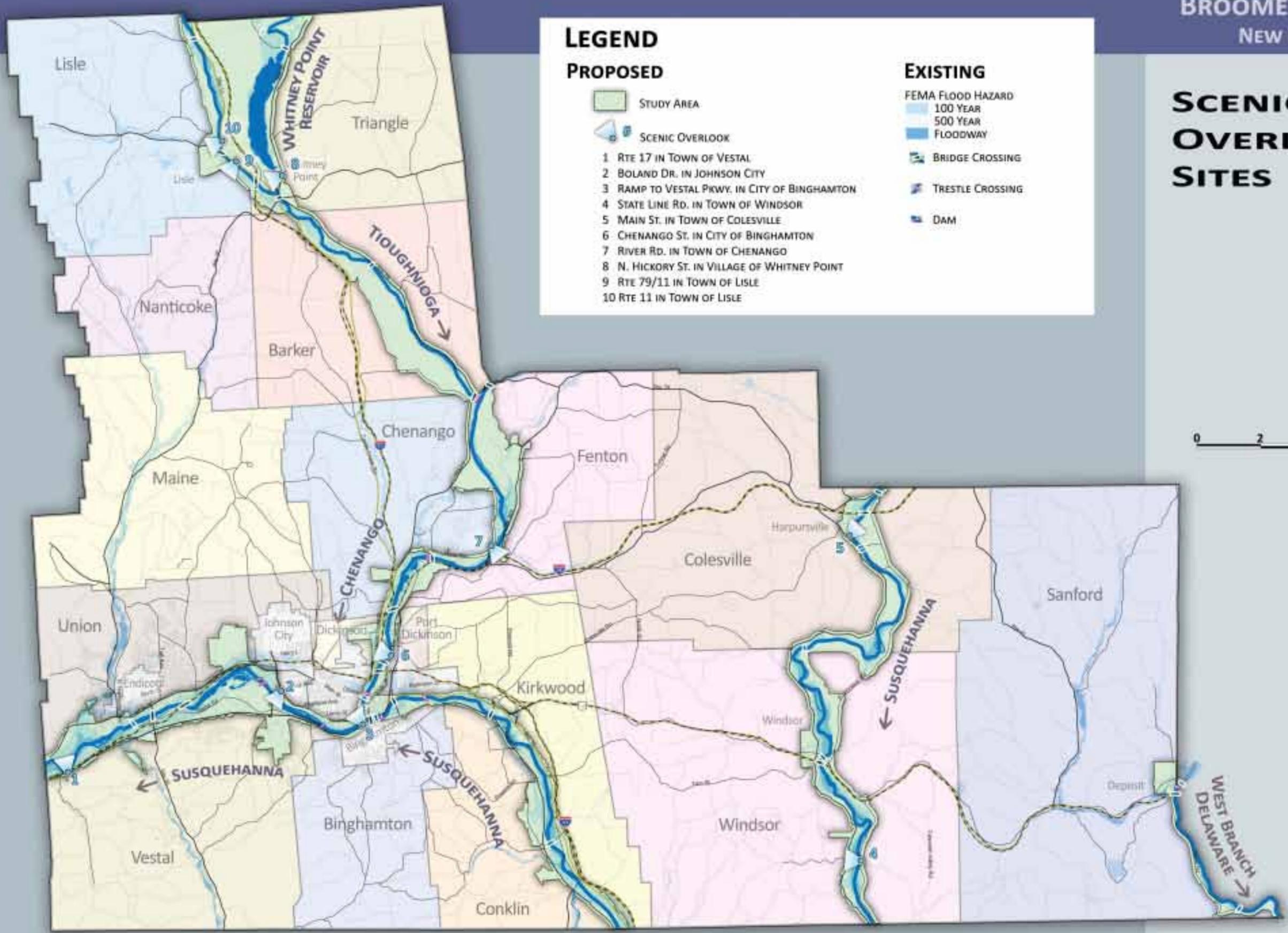
LEGEND

PROPOSED

-  STUDY AREA
-  SCENIC OVERLOOK
- 1 RTE 17 IN TOWN OF VESTAL
- 2 BOLAND DR. IN JOHNSON CITY
- 3 RAMP TO VESTAL PKWY. IN CITY OF BINGHAMTON
- 4 STATE LINE RD. IN TOWN OF WINDSOR
- 5 MAIN ST. IN TOWN OF COLESVILLE
- 6 CHENANGO ST. IN CITY OF BINGHAMTON
- 7 RIVER RD. IN TOWN OF CHENANGO
- 8 N. HICKORY ST. IN VILLAGE OF WHITNEY POINT
- 9 RTE 79/11 IN TOWN OF LISLE
- 10 RTE 11 IN TOWN OF LISLE

EXISTING

-  FEMA FLOOD HAZARD
-  100 YEAR
-  500 YEAR
-  FLOODWAY
-  BRIDGE CROSSING
-  TRESTLE CROSSING
-  DAM



INTERMUNICIPAL WATERFRONT PUBLIC ACCESS PLAN FOR THE COMMUNITIES OF THE CHENANGO, DELAWARE, SUSQUEHANNA & TIOUGHNIOGA RIVERS

THE MAP WAS
 PREPARED FOR
 THE NYSDOS
 WITH FUNDS
 PROVIDED UNDER
 TITLE 23 OF THE
 ENVIRONMENTAL
 PROTECTION
 FUND



DEC 2008

DESIGN
 Peter J. Smith & Company, Inc.
 1000 STATE ST. SUITE 200
 BINGHAMTON, NY 13902

5 Town of Colesville, Main Street south of Harpursville

On the west side of the Tioughnioga River, less than a mile south of Harpursville on Route 79 (Main Street), there is an opportunity for a scenic overlook. A pull-off is there currently. It is at a high point on the road with great views of the river and surrounding area.

6 Binghamton, Chenango Street north of Bevier Street Bridge

An opportunity exists to create a scenic overlook from Chenango Street for neighboring residents. The site overlooks the Chenango River and Otsiningo Park.



Scenic Overlook #5: Route 79 south of Harpursville



Scenic Overlook #6: Chenango Street across from Otsiningo Park

7 Town of Chenango, River Road

This proposed scenic overlook is located along River Road, Town of Chenango, across the river from Port Crane. The location looks down on the Chenango River near the entrance of Osborne Creek. The overlook would be along the proposed Chenango River West Bank path 2.

8 Near Dam at Whitney Point

This existing scenic overlook off of North Hickory Street offers an expansive, breathtaking view of Whitney Point Reservoir, its dam and the surrounding valley. It consists of a large, undefined asphalt area and an interpretive sign on Whitney Point Dam. Improvements to be considered include defining the parking area with striping and landscaping, benches, and further interpretive signing about the area and its history.





Scenic Overlook #7: River Road in the Town of Chenango



Scenic Overlook #8: Whitney Point Dam Overlook

9 Town of Lisle, Routes 79/11

This scenic overlook would be located about 1000 feet south of the Route 79 Bridge on the east side of the Tioughnioga River. It would offer views of the river, surrounding farmland, and valley from the Route 79/11 roadway.

10 Town of Lisle, Dudley Creek

An existing asphalted pullover is located on Route 11, on the east side of the Tioughnioga River about 1000 feet north of the Route 79 Bridge. It offers views of the river and the mouth of Dudley Creek. Improvements could include vegetation removal for better views, parking striping, and interpretive signage.



Scenic Overlook #9: Routes 79 / 11 Town of Lisle



Scenic Overlook #10: Route 11 across from Dudley Creek



3.6 Interpretive Sites

All of the other project types described in this chapter should contain interpretive signage or markers as part of their improvements. Some are highlighted in the following interpretive project descriptions. Other sites not associated with another project type but where there is a need for interpretation are presented as well. An interpretive site contains, at minimum, an interpretive feature. Enhanced sites may include a roadside turnout or parking, a kiosk where one may take leaflets, or landscaping improvements. Interpretive features are generally signs mounted waist height at an angle. However, creativity may be exercised to create features that are upright panels, multiple panels, kiosks, or sculptural elements. Traditional historic markers, a form of interpretive panels, were constructed of metal with raised letters. Modern materials are now available that allow printing of graphics on aluminum or fiberglass panels that have vivid colors, are durable and vandal resistant with strong colorfast properties.

Specific locations for interpretative improvements are described below and are identified with numbers corresponding to the map of Interpretive Sites at right.

1 Town of Vestal, Mouth of Choconut Creek

This area is significant because Onondaga, Nanticoke, Conoy, and Shawnee villages were located on both sides of the River where the Choconut Creek enters the Susquehanna. This project should also include interpretation of the 1779 Clinton-Sullivan Campaign. A grant for the design and construction of an interpretive kiosk at Choconut Creek was pursued previously and should be revisited.

2 City of Binghamton, Confluence Park

This project should include interpretation of the 1779 Clinton-Sullivan Campaign at Confluence Park. President George Washington gave orders to General John Sullivan to totally destroy and devastate the settlements of the hostile tribes of the Six Nations of Indians, capture as many prisoners of every age and sex as possible, and ruin their crops now in the ground and prevent their planting more. By Sullivan's account, forty of the Iroquois villages were destroyed along with all the crops and orchards. A grant for the design and construction of an interpretive kiosk at Confluence Park was pursued previously and should be revisited.

3 Town of Conklin, Broome Corporate Pkwy. Wetland Trails

There is potential to incorporate interpretive signs at the trailhead and at key points along the trails. Signage could deal with history of the site and educational/environmental aspects of the wetland.

4 Town of Windsor, "Wausaunia" (Rebecca Kellogg Ashley) Memorial Marker

Rebecca Kellogg Ashley was the first known white woman to come to Broome County. Site improvements should include refurbishing the commemorative stone and the surrounding area



Interpretive Site #1: Choconut Creek / Susquehanna River



Interpretive Site #2: Confluence Park



Interpretive Site #3: Broome Corporate Pkwy. Wetland



Interpretive Site #4: Rebecca K. Ashley Memorial Marker

Figure 11 - Recommended Interpretive Sites (right)

Source: peter j. smith & company, inc.

**INTERPRETIVE
SITES**

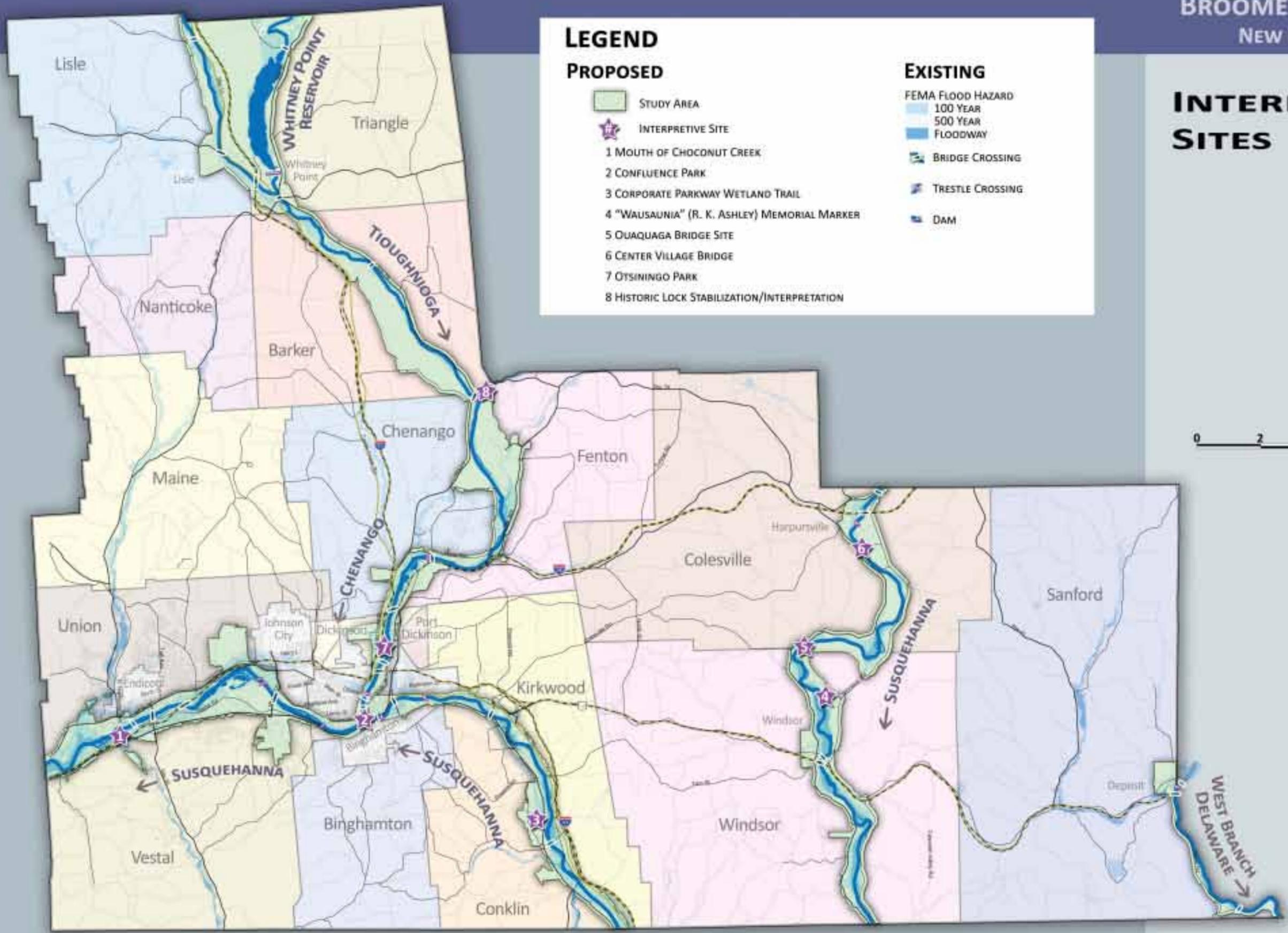
LEGEND

PROPOSED

- STUDY AREA
- INTERPRETIVE SITE
- 1 MOUTH OF CHOCONUT CREEK
- 2 CONFLUENCE PARK
- 3 CORPORATE PARKWAY WETLAND TRAIL
- 4 "WAUSAUNIA" (R. K. ASHLEY) MEMORIAL MARKER
- 5 OUAQUAGA BRIDGE SITE
- 6 CENTER VILLAGE BRIDGE
- 7 OTSININGO PARK
- 8 HISTORIC LOCK STABILIZATION/INTERPRETATION

EXISTING

- FEMA FLOOD HAZARD
- 100 YEAR
- 500 YEAR
- FLOODWAY
- BRIDGE CROSSING
- TRESTLE CROSSING
- DAM



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★ **Town of Windsor, Ouaquaga Bridge Site**

This area played a significant role in American history. Onaquaga, at one time the largest Native American village on the Susquehanna and an important outpost, is a mile down river. Just south of the bridge, General Clinton made a temporary encampment with his troops while en route to join General Sullivan’s campaign against the Iroquois. The first Settlement in Broome County after the Revolution was the Hamlet of Onaquaga.

★ **Harpurville-Center Village Bridge**

This historic bridge was built in 1890 to span Old Bridge Street across the Susquehanna River. When a new concrete bridge replaced it, it was decommissioned, but not demolished. According to HistoricBridges.org, this bridge rates 8 out of 10 for local as well as national historic significance. At a minimum, consideration should be to stabilize any further deterioration. It could also anchor a trailhead or provide pedestrian crossing. Interpretive features could highlight the happenings of the area at the time the bridge was constructed and its own history.

★ **Town of Dickinson, Otsiningo Park**

This project is to include interpretation of the 1779 Clinton-Sullivan Campaign (also know as the Sullivan Expedition) . In Athens, Pennsylvania, then known as Tioga or Tioga Point, Clinton met up with Sullivan’s forces. They marched northward and defeated the Tories and Indians at the Battle of Newtown (near present day Elmira, New York). The Iroquois nickname for Washington, “Town Destroyer”, may be a result of this expedition. A grant for the design and construction of an interpretive kiosk in Otsiningo Park was pursued previously and should be revisited.

★ **Town of Fenton, Historic Lock Stabilization/ Interpretation**

Located on the east bank of the Chenango River, just north of the confluence of the Chenango and Tioughnioga are the remains of a lock from the Chenango Canal. Interpretive features could describe the history of the canal. The lock can be accessed by car along River Road. A foot path traverses this section of the canal from the nearby Route 79 bridge to the north, south through Chenango Valley State Park.



Interpretive Site #5: Ouaquaga Bridge Site



Interpretive Site #6: Harpurville – Center Village Bridge



Interpretive Site #7: Otsiningo Park



Interpretive Site #8: Historic Lock Remains

Proposed interpretative improvements at the Harpurville - Center Village Bridge



Source: peter j. smith & company, inc.



Existing:

3.7 Waterfront Project Evaluation and Priority

To assist the communities of Broome County with their future waterfront planning efforts, each proposed project has been evaluated and prioritized. While completing the projects in the proposed priority order is not a requirement for the Department of State, the procedure can help to make the highest and best use of limited funding. The most appropriate projects to complete are those that will have the most positive impact on the greatest number of people.

3.7.1 *Rationale for Project Priority*

The rationale for assessing each project considers issues related to four separate categories. Each project was assigned a ranking between 1 (highest) and 3 (lowest) based on the total calculated score in each category. The results of the process were reviewed by the Project Advisory Committee. The categories include:

Access

- ◆ Does the project provide water access in areas where access is limited or non-existent?
- ◆ Does the project enhance multi-modal access opportunities?
- ◆ Will the project produce a significant visual and/or physical impact?

Circulation

- ◆ Does the project enhance multi-modal transportation options?
- ◆ Does the project improve circulation (i.e. the greater access to trails, the larger impact on circulation)?

Local Economy

- ◆ Does the project enhance local economic vitality and contribute to a “critical mass” of economic development?
- ◆ Is the project directly adjacent to an existing commercial area? Lower priority is placed on projects in remote locations with little or no commercial development to build upon.

Fundability

- ◆ Does the project exhibit the higher potential for funding common when there is existing local community support and/or high public ‘visibility’?
- ◆ Does the project have potential synergy with other funding applications or is it proximate to adjacent projects being considered for funding?
- ◆ Can the project be built quickly due to site control and readiness?

3.7.2 Project Ratings & Priority



Priority Criteria

	Access	Local Economy	Circulation	Fundability	Rating	Priority
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Hand-Carry Boat Launches

1 Town of Union, William H. Hill Park	2	3	2	3	10	1
2 Town of Windsor, CR 14 (State Line Road)	3	1	1	3	8	3
3 Village of Windsor near Chapel Street Bridge	3	3	1	3	10	1
4 Town of Fenton, Chenango Valley State Park	1	3	3	2	9	2
5 Town of Chenango at Chenango Forks	2	2	1	2	7	3
6 Village of Whitney Point near Route 11 bridge	1	3	3	2	9	2
7 Hamlet of Kilawog in Lisle Township	3	2	1	2	8	1

Boat Launch Ramp

1 Town of Vestal, Castle Gardens Park Expansion	1	3	2	3	9	1
2 Village of Endicott, Grippen Park	1	3	2	2	8	2
3 Village of Endwell near Riverhurst Cemetery	1	2	2	2	7	3
4 Village of Johnson City, Boland Park	1	2	2	2	7	3
5 Town of Kirkwood near Pennsylvania Border	3	1	3	2	9	1
6 Town of Dickinson, Otsiningo Park	2	2	3	2	9	1

Riverside Park Improvements

1 Town of Vestal, Castle Gardens Park	1	3	3	3	10	1
2 Village of Endicott, Roundtop Park	1	2	1	2	6	3
3 Village of Endicott, Mersereau Park	1	2	3	2	8	2
4 Town of Vestal, Turtle Tower Park	3	1	1	2	7	3
5 Johnson City, Boland Park	1	2	3	2	8	2
6 City of Binghamton, Rock Bottom Dam Park	2	3	2	3	10	1
7 Town of Kirkwood, Pine Camp	3	1	1	2	7	3
8 Town of Conklin, Alta Road Park	2	1	1	2	6	3
9 Town of Kirkwood, Veterans River Park	1	2	1	1	5	3
10 Village of Windsor, Village Community House	1	2	1	2	6	3
11 Village of Windsor, Klump Park	1	3	1	2	7	3
12 Village of Deposit, Fireman's Park	2	2	1	1	6	3
13 Village of Deposit, River Street Park	3	2	1	3	9	2
14 Village of Port Dickinson, Wilfrey Park	1	1	2	3	7	3
15 Town of Fenton, Gravel Pit Area Park	3	2	3	3	11	1
16 Town of Lisle, Dudley Creek	3	2	1	1	7	3

Fishing Access

1 Village of Deposit at Mill Street along Creek	2	3	2	3	10	1
2 Village of Deposit at River Street	2	3	2	3	10	1
3 Town of Chenango, Rte 12 Park & Ride	3	2	2	2	9	2
4 Village of Whitney Point, junction Tioughnioga & Otselic	2	3	2	2	9	2
5 Village of Whitney Point, adjacent to Interstate 81	2	3	2	2	9	2

Priority Criteria

Access	Local Economy	Circulation	Fundability	Rating	Priority
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Trails

1 Town of Vestal Rail Trail Extension	3	3	3	3	12	1
2 Vestal, Union, Endicott, The Big Loop	3	3	3	3	12	1
3 Vestal, Johnson City, Binghamton, The Little Loop	3	2	3	3	11	2
4 Binghamton, Susquehanna River North Bank Trail	2	2	3	2	9	3
5 Binghamton, Susquehanna River South Bank Trail	2	2	3	2	9	3
6 Binghamton, Town of Conklin, The Big Bend Trail	3	1	3	1	8	3
7 Harpursville to Pennsylvania Rail Trail	3	1	3	3	10	2
8 Village of Deposit, River Street Trail	1	2	1	3	7	3
9 Binghamton, Dickinson, The North Loop Trail	3	2	3	2	10	2
10 Chen-Fen Loop Trail	3	2	3	2	10	2
11 Village of Whitney Point to Existing Dam Trail	2	2	3	2	9	3
12 Village of Whitney Point to Village of Lisle Trail	2	2	1	1	6	3
13 Whitney Point Reservoir Trail	3	1	1	1	6	3

Pathways

1 Town of Conklin, Corporate Parkway Wetland Trail	2	1	2	2	7	2
2 Town of Chenango, Chenango River West Bank	3	1	3	3	10	1
3 Town of Barker, Tioughnioga River West Bank	3	1	3	3	10	1

Trailheads

1 Town of Vestal at old RR Bridge	2	2	3	2	9	2
2 Town of Conklin, Corporate Parkway Wetland Trail	2	2	2	3	9	2
3 Town of Windsor, CR 14 (State Line Road)	2	2	3	3	10	1
4 Village of Windsor at Old Train Station	3	3	2	2	10	1
5 Town of Colesville, Near Mountain Road	3	2	2	2	9	2
6 Town of Colesville, East Windsor Road	3	2	2	2	9	2

Scenic Overlooks

1 Town of Vestal, Proposed Rail Trail Extension	3	3	3	2	11	1
2 Johnson City, East of Boland Park	2	3	3	2	10	2
3 Binghamton, Confluence at Public Works Building	1	2	3	2	8	3
4 Town of Windsor, CR 14 (State Line Road)	2	2	3	2	9	3
5 Town of Colesville, Main Street	2	3	2	2	9	3
6 Binghamton, Chenango Street	3	2	2	3	10	2
7 Town of Chenango, River Road	2	2	3	3	10	2
8 Town of Triangle, Near Dam at Whitney Point	1	2	3	2	8	3
9 Town of Lisle, Routes 79/11	2	1	1	1	5	3
10 Town of Lisle, Dudley Creek	2	1	1	1	5	3

Interpretive Sites

1 Town of Vestal, Mouth of Choconut Creek	1	2	2	2	7	3
2 Binghamton, Confluence Park	1	2	1	2	6	3
3 Town of Conklin, Corporate Parkway Wetland Trail	1	1	2	2	6	3
4 Town of Windsor, RK Ashley Memorial Marker	1	1	1	2	5	3
5 Town of Windsor, Ouaquaga Bridge Site	1	2	2	3	8	2
6 Harpursville, Center Village Bridge	1	3	3	3	10	1
7 Town of Dickinson, Otsiningo Park	1	1	2	2	6	3
8 Town of Fenton, Historic Lock	1	1	3	3	8	2



4 Implementation Strategy

Implementing the full vision for the Riverway will involve many individuals, organizations, and agencies over a period of several years. Success can be achieved by breaking large, seemingly overwhelming tasks into a series of smaller tasks that can be completed strategically. There are also several efforts that can be initiated immediately, thereby generating excitement, momentum, and a sense of accomplishment. To this end, the recommendations prepared for this plan include three “Quick Win” projects that will help to raise awareness and increase support of the Riverway concept, as well as a list of individual projects that should be addressed to begin to attain the goals of regional economic development and environmental stewardship. The continual issue of how to manage maintenance is also discussed. Finally, an Implementation Matrix provides guidance on making some of the most easily attainable waterfront access projects listed a reality.

4.1 Recommendations - Quick Wins

To jump-start excitement, increase access to the riverfronts immediately, and raise public awareness, the following ‘Quick Win’ projects/initiatives should be investigated for implementation. These key projects/initiatives would provide the greatest benefit in the least amount of time and with minimal cost.

1. Windsor Boat Access –

Described as Hand Carry Boat Launch **3** ‘Village of Windsor, west side of the Susquehanna downstream of the Chapel Street Bridge’ in the listing of projects - This project was often cited during the public input process. It would open public access to a significant portion of river. Land is privately-owned, so would require an easement or purchase agreement.

2. Kirkwood Boat Launch –

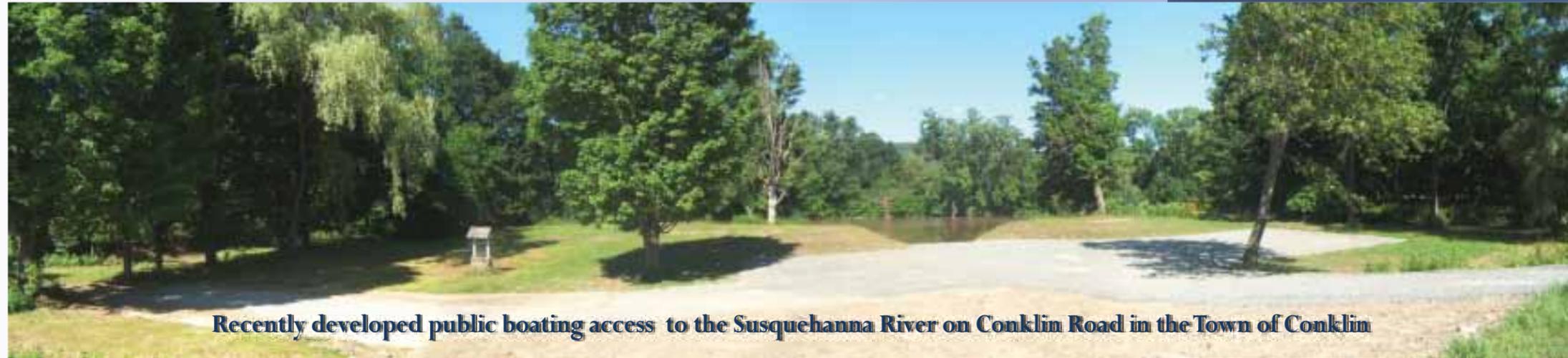
Described as Boat Launch Ramp **5** ‘Town of Kirkwood near Pennsylvania Border’ in the listing of projects – Backing for this project is already in place, as owner of this privately-owned land is considering developing camp site with public boat launch site. Public boat launch would require a public easement agreement and would open up a large stretch of the river to public access, as it would be only public boat launch on the Susquehanna in New York State south of Veterans River Park.

3. Village of Whitney Point Trail –

Described as Trail **11** ‘Village of Whitney Point to Existing Trail at Dam’ in listing of projects – This trail will connect the community to the waterfront. A farm access road already exists on which the trail could be developed. It would benefit a large group of people and commercial area . It is also referenced in Village of Whitney Point Downtown Strategic Plan.

4. Publish Tour Guide/Magazine -

Public awareness of what the Riverway has to offer is at the core of its use and protection. Publication of a tour guide is recommended, which would inform locals and visitors about the Riverway and region. Similar to tourism and heritage magazines found throughout New York State and the northeast, this piece should be developed to define a clear and exciting brand for Riverway leisure and recreation in Broome County. The publication would highlight the county’s many river-related attractions and update potential visitors on events occurring throughout the year. It would contain information on sites to see and places at which to eat and stay along the Riverway, as well as a map of the system with access points, attractions and amenities. The tour guide would also include the yearly event schedule. The tour guide may be offered free of charge with the cost to publish recouped through advertisements. It should be distributed to hospitality industry businesses and be placed on the web. The Guide should work in tandem with the Branding Strategy.



5. Publish Water Use Guide Book -

A guidebook should be developed specifically for users of the waterways within the Riverway. It should contain the following information:

- ◆ Waterway Information – include information on the length and character of the waterways; typical water conditions throughout the year; local waterway history
- ◆ Access Points - provide information on where paddlers can get on or off the waterways
- ◆ Amenities - inform paddlers of where to find potable water, toilets, camp areas, picnic areas, canoe/kayak outfitters, bait and tackle shops, grocery stores, restaurants, etc.
- ◆ Attractions – highlight points of interest along the trail (places to visit); contact information for individual points of interest should be provided where applicable
- ◆ Maps – provide a detailed map depicting the location of access points, attractions and amenities as an insert to the guidebook; consider removable, waterproof map
- ◆ Safety for Canoeists/Boaters – feature a checklist of “What to Bring”, emergency phone numbers, dam portage, how to obtain water level/ weather information via telephone or the web, highlight known hazards (motorized boater conflict, hunting areas, dams, etc.) and emphasize the importance of recognizing one’s limits.
- ◆ User Education - feature major boating and camping regulations in effect; provide information on fishing regulations; and promote the ‘Leave No Trace’ ethic.
- ◆ More Information - provide internet address for the website, e-newsletter, or digital bulletin and the phone numbers of the Greater Binghamton Convention & Visitors Bureau and the Syracuse Convention & Visitors Bureau, as well as contact information for SRWT, Inc.

A similar document has already been created by Ray Baker entitled Canoe/Kayak Launches near Binghamton, NY copyright January 10, 2011. This document covers boating on the Catatonk, Nanticoke, Otselic, Owego and Snake creeks and the Chemung, Chenango, Susquehanna, Tioughnioga, Unadilla, and Upper Delaware rivers. It lists access points to the waterways and provides driving directions.

4.2 Recommendations - Medium-term

The following list of additional recommendations (summarized at left and detailed on the following pages) are actions municipalities should undertake to improve waterfront access and use in the medium term. The list takes into consideration past and concurrent projects and initiatives, and efforts that represent primary ways to increase public access and understanding of their nearby waterways. The recommendations are not listed in any order of priority and do not represent a finite list of efforts that could be accomplished. As always, actions will be better accomplished when municipalities and partner funding agencies work together in a coordinated effort.

Medium-term Recommendations

1. Create Branding Strategy
2. Develop/put in place signage
3. Formulate website, e-newsletter, or bulletin
4. Begin implementing the Big Loop Trail
5. Look outside established project boundary
6. Publish yearly event schedule
7. Maintain concerted, systemized land acquisition effort
8. Continue to pursue ongoing initiatives/projects
9. Stabilize Canal Lock 107
10. Develop Blueway Plan
11. Manage maintenance

1. Branding Strategy for the Riverway

A county-wide branding strategy should be developed and implemented to define the Riverway and its attractions locally and promote them to visitors. The branding strategy should represent a collaboration of the county, its municipalities and stakeholder attractions. The strategy should define the Riverway as a major destination for outdoor recreational activities featuring world-class fishing, sport rafting, kayaking, bicycling, snowshoeing, cross country skiing and wildlife observation. The brand should be catered to outdoor enthusiasts within a half day's drive (250 miles), including Northeastern Pennsylvania, New York City, Albany, Syracuse and Rochester.

The branding strategy should include a combination of promotional and wayfinding elements that aim to achieve the following steps:

- ◆ Generate excitement and draw residents and visitors to the Riverway
- ◆ Direct travelers to the Riverway
- ◆ Orient visitors within the Riverway
- ◆ Provide information about the Riverway and direct users to visit other attractions

The primary promotional piece should be a periodical Riverway publication (quarterly or annually) such as a Tour Guide (as described in the Quick Wins section). A secondary key component to the branding strategy would be development of a wayfinding signage and information system (see below).

2. Develop/Put in Place Wayfinding Signage and Information System

This “two-pronged approach” would both alert and direct travelers to the Riverway, and also provide information about the Riverway and its attractions to encourage a lengthier visit to Broome County. The signage should include consistent design elements that allow viewers to immediately recognize it as a Riverway sign. Signage directing travelers to the Riverway should be located along major travel routes throughout Broome County and regional highways. Signage along the Riverway will be more detailed in nature, and include wayfinding, directing users to attractions throughout the Riverway. Interpretative signage would include specific information about its location, including river access points, local wildlife and landscape characteristics. Also consider the development of designated flags for easy identification of paddler/boater-friendly sites (amenities and access points) to waterway users. The flags would be installed at the river's edge so that they are highly visible from the water. This system has been used successfully along the Hudson River Water Trail, for example. The system provides advertising to businesses along the water trail and informs paddlers of where they can get off the water to access additional amenities.

3. Formulate Website, e-newsletter, or Digital Bulletin

A growing number of travelers first search the internet when trying to find information. To better connect with and capture those individuals most likely to use the Riverway, a website, e-newsletter, or digital bulletin should be developed. This site/information packet should be used to describe upcoming events associated with the waterways, new projects along rivers, local heritage areas, available grants to those along the Riverway, etc. This work should be coordinated with the branding strategy. As a reference, The Hudson River Valley Greenway/Hudson River Valley National Heritage Area could be examined for reference. One may view their monthly E-Newsletter at <http://www.hudsongreenway.state.ny.us/AbouttheGreenway/Newsletters.aspx>.

4. Begin Work Toward Implementing the Big Loop Trail

The public input revealed there was great public demand for creating trails connecting with the Vestal Rail and Chugnut Trails through the municipalities of Endicott, Union and Vestal (referred to as The Big Loop Trail). It is recommended to begin the course of actions to make the trail a reality due to the long time frame involved in accomplishing it. All involved municipalities (those previously stated and Broome County) should meet as soon as possible to plan strategy and way forward. A coordinated effort should be made to acquire the necessary land not already in the public domain and secure DOS funding.

5. Look Outside the Boundary

The waterways do not end at the Broome County line. Municipalities, agencies and organizations in the surrounding counties of Tioga, Cortland, Chenango, Otsego, and Delaware, as well as Susquehanna and Wayne counties in Pennsylvania, may also be working on similar projects. Coordination of marketing, trails, blueways, etc. must be accomplished with awareness of the work of surrounding communities to make a viable, cohesive Riverway.

6. Publish Yearly Event Schedule

To better publicize festivals/events, it is recommended that each year the schedule of all such events is produced and distributed to the tourism industry, local commerce entities, and public institutions.

7. Maintain a Concerted, Systemized Land Acquisition Effort

Municipalities in Broome County have a history of purchasing properties located in the flood zone as they become available. (Broome County provided a list of buy-out properties to date, which are mapped in Figure 14.) Potential future buy-out properties should be mapped and prioritized in terms of significance towards improving waterway access and enjoyment. As funds and key parcels become available, the county will have a proactive plan in place to act. Prioritizing land early will make it more likely that land better suited for placement of public access facilities can be obtained. The priority plan also will assist with the location of potential conservation easements and riparian buffers to ensure water quality protection.

*Medium-term
Recommendations*

1. Create Branding Strategy
2. Develop/put in place signage
3. Formulate website, e-newsletter, or bulletin
4. Begin implementing the Big Loop Trail
5. Look outside established project boundary
6. Publish yearly event schedule
7. Maintain concerted, systemized land acquisition effort
8. Continue to pursue ongoing initiatives/projects
9. Stabilize Canal Lock 107
10. Develop Blueway Plan
11. Manage maintenance

8. Continue to Pursue Ongoing Initiatives/Projects

A number of development initiatives and projects are underway in the study area. Efforts should be sustained to make these become reality. Two concurrent initiatives, Headwaters River Trail and Susquehanna Scenic Byway, are discussed in this document. The projects include:

Rock Bottom Dam Whitewater Park –

The City of Binghamton and NYSDEC are considering reconfiguring the Rock Bottom Dam to make it less of a threat to boater/swimmer safety and make it more environmentally friendly by allowing fish to more easily swim upstream. There are two options currently being considered. One is to only rework the dam; the other is to rework the dam and also constructing a whitewater park for kayakers. Choosing the whitewater park option would offer a unique amenity to the Binghamton area, greatly improve access to the Riverway and, according to some studies, be economically viable for the City.

Permanent Regional Farmers Market –

The Broome County Department of Planning And Economic Development explored the feasibility of creating a Regional Farmers Market at Otsiningo Park. The study recommended the establishment of a nonprofit sponsor (board of 13 members) and a design development study, with eventual establishment of a fully functioning Regional Farmers Market. Regional Farmers Markets differ from farmers markets in that they typically are larger with more vendors, are located in a permanent facility with easy access to/visibility from the highway and utilities, and generally operate year round. There are currently three farmers markets in the local area: Downtown Binghamton Farmers' Market located at Court House Square, Otsiningo Park Farmers' Market, and Vestal Farmers' Market located in the Vestal Library parking lot. These local markets do not offer on-site amenities such as restrooms, access to electricity, etc.

9. Stabilize Canal Lock 107

The historic guard lock of the Chenango Canal is located on state-owned land along River Road in the Town of Fenton. Efforts should be made to stabilize and maintain the stone structure, embellish the interpretive program and strengthen its connection with Chenango Valley State Park.

10. Develop Blueway Plan

A blueway is a small boat and paddling route that follows a network of creeks, streams and rivers. A blueway provides recreational opportunities, and designated stops along the water trail allow users to enjoy land-based attractions in the vicinity. An added benefit of a blueway is the increased environmental awareness that is fostered among blueway users, local residents and adjacent business owners alike.

New York State no longer has a formal designation or status for blueways, although the Department of State Division of Coastal Resources has awarded grants in the recent past for the development of blueway plans. Even so, a blueway plan should be developed for the entire system of waterways in Broome County. The plan would be the framework for local and regional planning and community development regarding waterways. Municipalities should adopt the blueway plan into their comprehensive parks and recreation, and growth management plans. The plan would link the 'blueway' terminology with the waterways. It would bring attention to the waterways, provide access to them, develop marked water trails and protect and enhance this valuable water resource.

11. Manage Maintenance

During public meetings held for this project, it was often inquired who would be responsible for maintenance of the proposed projects and from where would the money come. Grants are available to support the cost of constructing many of the projects in this report; however, there is little outside assistance for the maintenance of the completed projects. Generally, a project is the responsibility of the governmental entity with jurisdiction over the site - typically the county, city, township or village. And while communities are responsible for maintenance which is generally funded out of their operating budgets, there are ways for them to get help with some maintenance tasks:

- Stewardship Programs – Similar to an Adopt-a-Highway program, a community can organize volunteers - individuals, groups or businesses with the responsibility to maintain their favorite section of river. Volunteers would be given the task of keeping an area free from litter and to report damage of facilities to the municipality having jurisdiction. In turn, the volunteer's name would be posted in a prominent location such as a sign or kiosk in a park, boat launch or scenic overlook and they would have the satisfaction of a job well-done.
- Clean-up Events – Many communities across the nation hold an annual River Sweep event where volunteers are asked to clean up a section of river. Typically, event sponsors are sought to provide food, drinks and trash bags with the municipality providing trash pickup once the event is complete. Volunteers can also take on larger tasks such as trail clearing, or removing downed trees that create a navigational hazard. A quick web search of river sweep events will yield information about how these proceedings are organized and managed.

- Public Buy-in – When a community takes ownership of a park, boat launch, trail, etc., the property is better treated and maintained by the public, lessening some of the cost of maintenance. Methods to instill ownership include involving local residents in the development of the property, increasing public awareness of the unique benefits of public riverfront access. Oftentimes, simply making the public aware the property exists at all can lead to great benefit.

There are several types of projects proposed in this report with varied maintenance requirements. Projects requiring very little maintenance include trailheads, scenic overlooks, interpretive sites and fishing access sites. These projects require little more than an occasional pickup of litter and emptying of trash receptacles if they are included. Long term maintenance may include replacement of signs and benches, if there are any. Projects requiring more maintenance include riverside parks and boat launches. In addition to litter pickup and trash receptacle emptying, these will generally require mowing during the summer months. However, at the boat launches that are not within an existing park, mowing should be infrequent (three to four times each year) in order to control brush and maintain natural character.



Historic Chenango Canal Lock 107

4.3 Model Project Implementation – A Tool For Grantwriting

This section offers a starting point and guidance for municipalities when initiating the process of obtaining funding for an individual waterfront access project. Five examples are provided from the Priority Waterfront Access Project types outlined in Section 3 (beginning on page 16). Model projects include:

1. Hand carry Boat Launch
2. Riverside Park Improvement
3. Fishing Access Site
4. Interpretive Site
5. Scenic Overlook

A representative graphic for each project type is shown. These graphics are for illustrative purposes only and are not mandating or limiting the scope of each project type. Additionally, an inventory of typical elements associated for each project type is given. The typical range of cost of construction associated with each project type is listed below:

Representational Project	Budget Range
Hand carry Boat Launch	\$40,000 to 60,000
Riverside Park Improvement	\$100,000 to 200,000
Fishing Access Site	\$15,000 to 60,000
Interpretive Site	\$15,000 to 35,000
Scenic Overlook	\$250,000 to 350,000

It is anticipated that each municipality will take the “lead” for individual projects located within their own municipal boundary. A grant writer may or may not be procured depending on staffing levels. For larger regional projects, cooperation between municipalities and the county is encouraged.

A listing of the potential funding sources is listed in Appendix IV. The list is not intended to be comprehensive and will evolve over time. The information is intended to serve as a useful tool and a starting point for municipalities as they begin the application process.

Representational Project #1 –

An example of a Hand Carry Boat Launch downstream of the Chapel Street bridge (Route 28) in the Village of Windsor

This area has good river and bank conditions for a launch site. Basic elements of construction include a parking area for vehicles and canoe/kayak trailers, a trail to access the water (concrete, asphalt, mulched or other material) and some built form to aid in putting in and taking out canoes/kayaks. Additional items to consider would be amenities such as benches, interpretive signs (possibly describing the history and/or flora/fauna of the area), trash receptacles, lighting or public restrooms. Potential partners/stakeholders could be the NYS DEC, Broome County, ACKC and H RTP.

Abbreviations:

- NYS DEC – New York State Department of Environmental Conservation
- NYS OPRHP – New York State Office of Parks, Recreation and Historic Preservation
- NYS DOT – New York State Department of Transportation
- DOI FWS – Department of Interior Fish and Wildlife Service
- SHACAB - Susquehanna Heritage Area Commission and Advisory Board
- ACKC – Ahwaga Canoe & Kayak Club
- H RTP - The Headwaters River Trail Partnership



Representational Project #2 –

An example of a Riverside Park Improvement at Boland Park in Johnson City

Riverside parks may have a wide range of improvements needed to satisfy its users, maintain safety, and efficiently work within the whole system of parks in the region. Boland Park is an example that illustrates some common improvements to be made. These improvements are additional athletic venues (baseball or softball fields, tennis courts, and basketball court), a new playground area, additional asphalt pathways, concrete walkways, tree plantings and boat launch ramp facility. Potential partners/stakeholders could be the NYS DEC, NYS OPRHP, Broome County, ACKC and HRTP.

Representational Project #3 –

An example of a Fishing Access Site development at the Junction of the Tioughnioga and Otselec Rivers in Village of Whitney Point

The NYS DEC had considered this area for future water access development and would be a potential partner, as would Broome County. Necessary elements of this project include a parking lot and trail access to the water's edge. Additional amenities to consider are interpretive panels, benches, picnic tables, and a fish cleaning station.



Representational Project #4 -

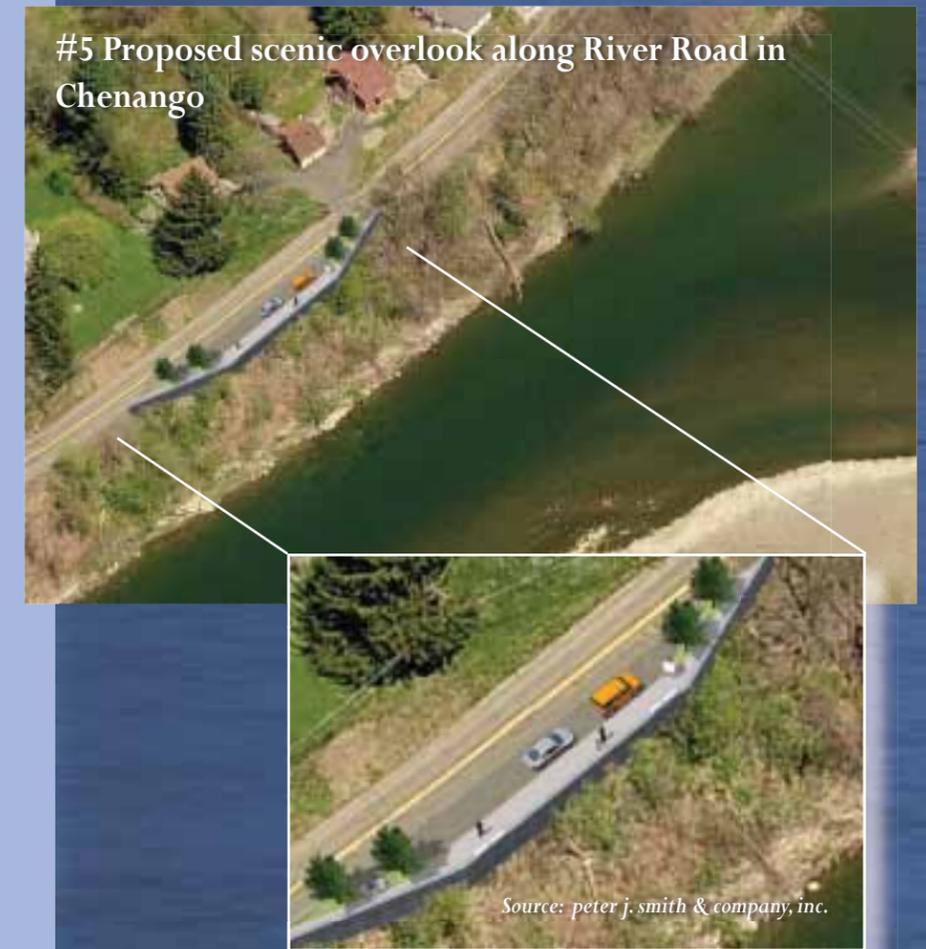
An example of an Interpretive Site Development at Center Village Bridge in Harpursville

As part of a potential trail system and trailhead, the site is an ideal location for interpretive information about the historic bridge and related local history. Project elements include a small parking area, interpretive displays, benches and a walkway system. Additional items could be trail map signage and trail information. Potential partners/stakeholders could be the NYS DEC, NYS OPRHP, NYS DOT, Broome County and SHACAB.

Representational Project #5 -

An example of a Scenic Overlook along River Road in the Town of Chenango

The basic elements that make up this overlook are a retaining wall, parallel parking area, curb and walkway and interpretive signage. The illustration also includes tree planting, landscaping and benches. Additional items which could be considered are a shelter/picnic area and restrooms. Potential partners could be NYS DOT and Broome County.



5 Tourism & Market Analysis – A Riverway Economy

For the latter half of the twentieth century, the Broome County economy has been largely driven by the rapid development of high technology and the sustaining presence of education. Corporations such as IBM, Singer-Link and Universal Instruments have driven regional growth through their presence, providing employment, innovation and community stewardship. Binghamton University, recognized as among the premier New York State research institutions, is one of the area's largest employers and remains the predominant economic engine for the region. The university draws not only students, but also thousands of annual visitors and high end academic talent; and provides the region with state of the art sports, educational and cultural facilities.

Complementary to the traditional economic base of the county, the Susquehanna, Chenango, Otselec and Tioughnioga river corridors represent Broome County's most significant natural assets and potential for new growth. The river corridors present tremendous opportunities for unique tourism growth and economic stabilization of the local communities. However, with that opportunity and potential pressure for development there is also the threat of detrimental impact to the county's greatest natural assets. It is therefore imperative that efforts to bring new economic vitality and draw visitors to the area must be steered in the direction of low impact physical development that can coexist with the natural landscapes of the county. In targeting efforts to draw visitors and dollars into the economy, the county and its municipalities should focus upon connecting residents and visitors to its landscape in ways that would not only provide positive economic windfall, but also generate new stewards who would protect and enhance the landscape into the future.

Riverway systems provide *real and sustainable growth* for communities, physically, socially and economically. By defining the importance of a landscape, promoting its qualities and providing public access, a region can stir new, place-based activity that draws residents and visitors alike. These outdoor recreationalists have direct impacts upon the local economy, purchasing sporting goods, frequenting restaurants, utilizing transportation and staying in hotels. Correspondingly, since the landscape increases in importance to the recreation and economic sectors, it also become essential for the local community to preserve and enhance its rural character, which has a spin-off effect of strengthening property values.

This chapter has evaluated the various opportunities that exist in Broome County for riverway-related economic development.

5.1 Pieces of the Future

To establish a viable riverway economy, the Broome County area must take steps to connect residents and visitors to its waterways. The following are key project recommendations geared to realize the economic benefits of a riverway:

- ◆ Create new **access points** along each of the rivers that allow for motorized and non-motorized boat launches as well as observation overlooks and fishing piers
- ◆ Develop new **trails** along the Broome County waterways, connecting to existing trails and population centers for recreation and wildlife observation, as well as commuter transportation
- ◆ Install **wildlife observation interpretive displays** with information about local wildlife
- ◆ Modify **Rock Bottom Dam** to alleviate existing dangers to boaters and fishermen caused by the existing construction of the dam, provide for fish passage, and create a whitewater channel for kayakers
- ◆ Commission an engineering study and construct the **Rock Bottom Whitewater Park** along the northern bank of the Susquehanna River, bypassing the Rock Bottom Dam
- ◆ Establish the Broome County Regional Farmers' Market
- ◆ Develop and implement a **branding strategy** for the riverway

5.2 Demographic Excerpt

Broome County is situated in a primarily rural region, with some suburban development, centered around the City of Binghamton. The county features a population of just over 195,000 residents, projected to slightly decline by a margin of less than 0.3%, annually, over the next five years. See Table 2. The county's median household income is slightly more than \$45,000, well below the statewide income of just over \$55,000. The median age in the county is 40.5 years and slightly growing. This figure is seven percent older than the New York State median of 37.7 years of age.

5.2.1 Tapestries

The predominant tapestry segments found in Broome County were studied in order to gain a more intimate understanding of the local population, what they are interested in and what activities in which they commonly partake. Tapestry segmentation classifies United States census areas into 65 distinct market segments. Population groups with the most similar characteristics are grouped together, while groups showing divergent characteristics are separated. Evaluating tapestries allows for the combination of the “who” of lifestyle demography with the “where” of local neighborhood geography. This creates a model of various lifestyle classifications of actual neighborhoods and distinct behavioral market segments.⁵

Of the 65 defined tapestry segments, five of those account for nearly 50% of the Broome County population. It was found that these dominant segments are reflective of a stable or slightly declining population. Statistics indicate that the county is composed of resident groups that are very invested in where they live, taking pride in their local community and highly likely to spend their recreational and travel dollars locally. Common across these dominant segments are the following interests:

- ◆ Taking domestic and affordable vacations
- ◆ Engaging in outdoor recreation such as fishing, canoeing and hiking
- ◆ Participating in community events
- ◆ Dining at family restaurants

While these segments do not have excessive amounts of disposable income, residents are very active in family-oriented activities including fishing and various physical sports. The population also tends to do its spending at affordable retail businesses, family restaurants and watching local sporting events. The tapestry segment numbers suggest that the Broome County population would be very interested in the continued development of outdoor recreational facilities and sporting opportunities.

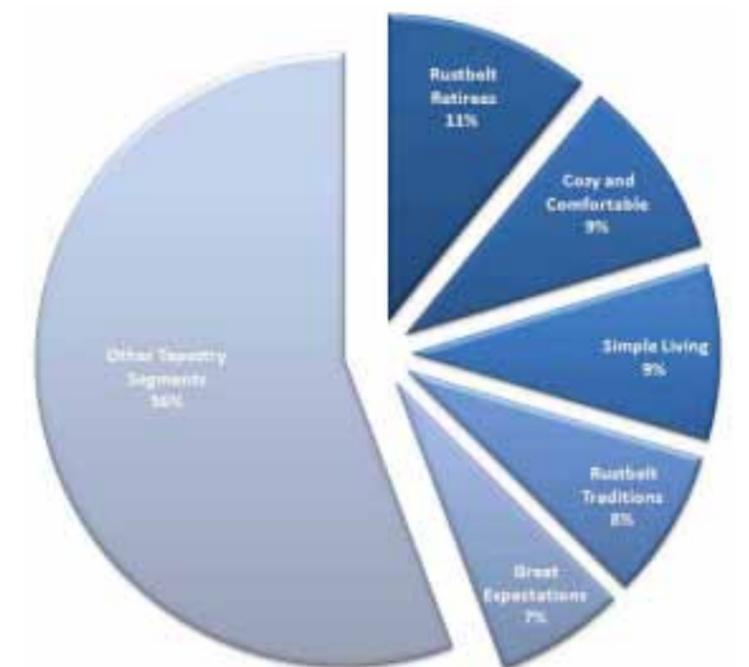
⁵ ESRI. “2010 Methodology Statement: Esri Data – Tapestry Segmentation for Block Groups and ZIP+4s.” July, 2010.

Table 2 - General Demographics

Broome County	2010	2015
Population	195,793	193,209
Households	79,610	79,105
Median Age	40.5	40.7
Median Household Income	\$45,154	\$52,614

Source: ESRI Business Analyst Online: United States Census Projections

Figure 12 - Tapestry Segments of Broome County



Source: ESRI Business Analyst Online: United States Census Projections

5.3 Tourism Industry Overview

The tourism industry is vital to the economic stability and growth of Broome County as well as the entire Central Region of Upstate New York, defined by the New York State Department of Economic Development as an eight-county tourism region west of the Catskills, east of the Finger Lakes and south of the Adirondacks. Visitors to New York account for more than \$50 billion in spending and directly sustain approximately 700,000 jobs state-wide. Despite a state economy that has widely struggled, tourism continues to be a growth sector, expanding at rates between four and ten percent, annually.

The importance of tourism for Broome County and the Central Region of New York State is evident in visitor spending and employment figures. Visitor spending throughout the Central region totaled more than \$1.75 billion in 2008, up 3.6% from the previous year. Broome County accounts for 16% of that spending at more than \$280 million annually.

Table 3 Growth in Visitor Spending

Visitor Spending Growth	2007	2008	Growth
Central Region	\$1.699 bil	\$1.760 bil	+3.6%
Broome County	\$277.7 mil	\$280.1 mil	+0.9%

Source: *The Economic Impact of Tourism in New York State: Central Leatherstocking Focus*

An evaluation of the various sectors that are impacted by tourism and visitor spending provides an indication of Broome County's strengths as well as where there is opportunity for improvement. Refer to Table 4. Broome County has larger shares of the regional visitor lodging (20.5%), food and beverage (22.3%) and transportation (44.8%) expenditures.⁶

⁶ Tourism Economics. "The Economic Impact of Tourism in New York State: Central Leatherstocking Focus." April 2009.

This can be greatly attributed to the location of one of the region's primary urban centers, the City of Binghamton, in Broome County, as well as the presence of a major academic institution in Binghamton University. One category in which Broome County trails the Central Region on the whole is in recreation spending by visitors, contributing merely 1.8% of the region's revenues. Considering the county's extensive natural and water-based assets surrounding a large urban hub, it is reasonable to expect significant opportunity for new growth in recreation-based tourism.

In addition to visitor spending, the economic impact of tourism is reflected in employment figures as well as state and local tax revenues (Table 5). Nearly 7,000 Broome County residents are directly employed in the hospitality industry, garnering an annual income of just under \$150 million. Tourism is also extremely valuable for municipal budgets, providing \$18.8 million in local taxes and an additional \$17.4 million to the State of New York. Broome County should continue to explore the potential to grow the economic impact of tourism, bringing in outside dollars and enhancing the vitality of local communities.

Table 4 Visitor Spending by Tourism Sector

2008 Visitor Spending	Lodging	Recreation	Food & Beverage	Retail	Transport	Second Homes	Total
Central Region	\$328.9 mil	\$396.2 mil	\$381.1 mil	\$405.1 mil	\$124.0 mil	\$125.1 mil	\$1,760.2 mil
Broome County	\$67.3 mil	\$7.2 mil	\$84.9 mil	\$58.2 mil	\$55.5 mil	\$7.0 mil	\$280.1 mil
Regional Share	20.5%	1.8%	22.3%	14.4%	44.8%	5.6%	15.9%

Source: *The Economic Impact of Tourism in New York State: Central Leatherstocking Focus*

Table 5 Economic Impact of Tourism

Tourism Impact	Employment	Visitor Spending	Labor Income	Local Taxes	State Taxes
Central Region	32,170	\$1,760.2 mil	\$877.1 mil	\$109.0 mil	\$109.6 mil
Broome County	6,984	\$280.1 mil	\$145.3 mil	\$18.8 mil	\$17.4 mil
Regional Share	21.7%	15.9%	16.6%	17.2%	15.9%

Source: *The Economic Impact of Tourism in New York State: Central Leatherstocking Focus*

5.3.1 *Visitor Characteristics*

As a means to identify potential attractions that tourists interested in Broome County are likely to be drawn to, common characteristics and trends are profiled for the typical visitor that stays in the area. In 2006, a study was conducted to examine the market potential for a Center for Technology and Innovation in the Binghamton Area. This study utilized survey data to profile visitors to the Central Region (since renamed from the Central Leatherstocking Region). The results of the survey still relevant to this study are summarized below:

Of the total visitors that come to the Central New York region on an annual basis, it is estimated that 81% are there for leisurely travel, as opposed to the remaining 19% who identify themselves as business travelers. Of those leisurely travelers, 29% visit to see friends and family, 15% come for a specific event and another 20% come to Central New York for a weekend getaway or general vacation. In 2002, the average income of visitor parties interested in the Central Region is \$62,000. This is in contrast to an average income of \$71,000 for visiting parties to New York State as a whole and \$69,000 across the United States.⁷ These figures would suggest that visitors to the Central Region are interested in affordable vacations where they are able to stretch their dollars further.

The typical traveler to Broome County and the surrounding Central Region arrives by automobile (78%), at a rate approximately 10% higher than the rest of New York State and the rest of the United States. These travelers arrive from an average distance of 498 miles, less than the average of 525 miles for all of New York State and 522 miles traveled, averaged across the United States. Upon arriving, 38% stay in a hotel or motel and another 29% stay in a private home of friends and family. The remaining 33% choose other accommodations, including camping and recreational vehicles at rates approximately one third higher than New York State (22%) and the rest of the United States (23%). Finally the average length of stay for Central Region (2.25 days) visitors is significantly higher than Visitors to all of New York State (2.12 days) and the United States (2.18 days).⁸ While the Broome County region does not typically draw from as

far distances as New York State and the rest of the country, it is evident that the visitors they do bring are inclined to stay longer when compared to statewide and national averages.

As evidenced above, visitors to Broome County and the surrounding region are interested in affordable vacations in which they are able to extend their stay over longer periods of time and stretch the value of their dollar. Once here, these visitors have a high level of local mobility as they typically travel with their personal automobile and are likely interested in traveling throughout the region during their stay, as opposed to remaining in a single locale. Suggesting that they also might be more interested than the typical traveler in recreational tourism are statistics pointing out that they do not stay in hotel or motel accommodations as rates typical to the rest of New York State, and often utilize “other” accommodations such as camping and recreational vehicles. Future tourism development for Broome County needs to consider the region’s strengths, its reputation with travelers and continue to grow its best market for a visitor economy.

⁷ D.K. Shifflet & Associates, Ltd. “Central Leatherstocking Region Top Line Visitor Profile.” 2002.

⁸ D.K. Shifflet & Associates, Ltd. “Central Leatherstocking Region Top Line Visitor Profile.” 2002.

5.4 Developing a Riverway Economy

Riverways are proven to strengthen and grow sustainable communities throughout the United States. Defining the local landscape through a number of different forms including conservation lands, protected open space, trailways and waterways, riverways guard the character of the natural landscapes and provide access for residents. Riverways make municipalities better places to live, encouraging active and healthy lifestyles, providing opportunities for recreation and non-motorized transportation, and physically connecting residents with the environment.

5.4.1 Direct Economic Impacts of a Riverway

Complementing the numerous quality of life benefits that are supported as well as tourism dollars that they can generate by drawing users, riverways provide a significant economic boon to the host communities simply due to their presence. Studies of home values proximate to greenways and trail networks show that there exists a direct positive relationship between the two. According to a 2003 case study of Indianapolis, IN by the Center for Urban Policy and the Environment, when all other variables of a home sale (location, square footage, lot size, etc.) are similar, buyers are willing to pay, on average, \$3,731 more for a home located within one half mile of a greenway corridor. The study also suggests that if that greenway features a trail system, consumers will pay an additional \$4,384 for their home, or for a home within a half mile of a conservation greenway, they will pay an additional \$5,317. Finally, the case study examined the impacts of the Monon Trail, the flagship greenway in the regional system. It was found that locating within one half mile of this trail was “the equivalent of having beachfront property in Indianapolis,” with buyers paying a premium of \$13,059 for that location. Overall, it was estimated that the impact of greenways upon home values throughout Indianapolis exceeds \$140 million.⁹

The continued development of a riverway system throughout Broome County offers a multitude of opportunities for new economic growth. While a riverway certainly has the ability to bring economic growth through tourism and recreational activities, it will also directly grow the value and desirability of property throughout the county. These impacts are not only growth, but economic stabilization. As the national economy becomes increasingly service-based, industries can be located anywhere. Riverways will preserve and provide access to natural landscapes that enhance quality of life and, potentially, the viability of the county to attract new business.

⁹ Center for Urban Policy and the Environment. “Public Choices and Property Values: Evidence from Greenways in Indianapolis.” December, 2003.

5.4.2 Wildlife Recreation

Wildlife recreation is a growing economic sector that has the potential to serve as a regional tourist draw in conjunction with the riverway and heritage corridors developing in Broome County. Consisting primarily of fishing, hunting and wildlife observation, this sector is able to draw significant visitor numbers, while maintaining a relatively low impact upon the landscape. Nationwide in 2006, approximately 87 million people actively participated in wildlife recreation, an increase of 6% over the 2001 estimate, five years earlier. Most relevant to the Broome County waterways are fishing and wildlife observation.

A Fishing Destination

In 2006, expenditures in the United States for fishing alone totaled more than \$42 billion. Of this, \$17.9 billion was spent on trip related expenditures, including \$6.3 billion on lodging and food as well as \$5 billion on transportation. A further \$18.8 billion was spent on fishing equipment purchases.

The Broome County waterways are recognized for prime fishing locations and are a destination for fishermen and major events in both warm and cold weather. The primary species pulled from the Susquehanna, Chenango, Otselic and Tioughnioga Rivers are walleye, small mouth bass and northern pike. Each of the rivers is recognized for ideal conditions of deep pools with slow-moving waters, especially proximate to the dams on the Susquehanna River. All are accessible by non-motorized watercraft, while only the Chenango and Susquehanna Rivers and the Whitney Point Reservoir can be accessed with a motorboat. Along the eastern border of the county, the west branch of the Delaware River offers vibrant fly-fishing opportunities, known for its brown and rainbow trout populations.

Several events throughout the year are held on the rivers, attracting anglers to Broome County. One such event is the New York State Crappie Derby. This ice fishing event, inaugurated 38 years ago, is held in late January each year at Whitney Point Lake. The event attracts more than 4,000 attendees, including 1,300 participants, vying for a winners’ purse ranging between \$10,000 and \$14,000. Many of the participants attend from throughout the state and northern Pennsylvania.

Broome County Intermunicipal Waterfront Public Access Plan

To capitalize upon the county’s natural fishing assets, potential exists for significantly more fishing-related tourism. An analysis of the United States Fish and Wildlife Service fishing surveys, shows that New York State is among the top five states for drawing visitors from other states to fish. Each year, 3.2 million days are spent by visitors who travel to New York for fishing trips, accounting for more than 10% of all fishing activity in the State. Exporting only 1.4 million fishing days, New York State experience a net influx of 1.8 million days spent by fishermen from other states.

Table 6 - Top Visitor Destination States for Fishing

State	Days by nonresidents			Days by state’s residents in other states			Visitors Net gain or loss
	Rank	Number	Percent	Rank	Number	Percent	
Minnesota	1	6.7 mil	25	26	1.0 mil	5	5.7 mil
Florida	2	5.7 mil	12	14	1.7 mil	4	4.0 mil
Wisconsin	3	3.7 mil	22	20	1.2 mil	8	2.5 mil
North Carolina	4	3.3 mil	15	15	1.7 mil	8	1.6 mil
New York	5	3.2 mil	11	18	1.4 mil	5	1.8 mil

Source: United States Fish and Wildlife Service

While New York State stands as one of the nation’s top fishing destinations, neighboring Pennsylvania is the third greatest supplier of fishing tourists. Each year, 5 million days are spent by Pennsylvania residents traveling to other states for fishing excursions. That is, more than one in every five days of fishing spent by Pennsylvania residents occurs in another state.

Table 7 - Top Visitor Supplier States for Fishing

State	Days by nonresidents			Days by state’s residents in other states			Visitors Net gain or loss
	Rank	Number	Percent	Rank	Number	Percent	
Illinois	39	0.5 mil	2	1	6.8 mil	25	(6.3 mil)
Texas	20	1.2 mil	2	2	5.8 mil	10	(4.6 mil)
Pennsylvania	16	1.6 mil	8	3	5.0 mil	21	(3.4 mil)
California	24	1.1 mil	3	4	3.3 mil	9	(2.2 mil)
Virginia	21	1.2 mil	8	5	2.9 mil	18	(2.7 mil)

Source: United States Fish and Wildlife Service

Among the challenges that the fishing industry faces in Broome County is quality access to its waterways. Among the county’s rivers, only the Otselec River has been classified by the NYS DEC as having “excellent” access. The Chenango River, in contrast, is classified as having just “fair” access. Through marketing its reputation for outstanding fishing and improving potential access points, Broome County has the potential to take advantage of its location proximate to the third largest visitor supplier states for fishing and significantly grow its wildlife tourism economy.

Wildlife Observation

Another potential visitor draw to the Broome County river systems are “wildlife watchers.” Most popularly known for bird watching, this sector observes wildlife including waterfowl and aquatic life. These visitors have very low detrimental



Image from nysparks.state.ny.us

impacts upon the landscape and are known for serving as stewards of the environment, taking ownership over its protection and enhancement. Nationwide, this is the fastest growing category of wildlife recreationalists, increasing more than eight percent from 2001 to 2005 and accounts for \$71.1 million in spending. Minimal infrastructure is required and is essentially limited to trails and potentially observation structures for overlook and cold weather viewing.



Image from teaming.com

Wildlife Viewing

5.5 Returning to the Water

Broome County's greatest natural assets, the rivers, are often also considered its greatest threat. According to the City of Binghamton Local Waterfront Revitalization Program (LWRP), "the hazard of floods has been a defining feature of the City of Binghamton since its origins." As a result, the county and city have constructed dykes along the banks of the rivers, to protect its residents, roadways, neighborhoods and commercial districts. While the dykes prevent catastrophic flooding events that could potentially wipe out entire developed areas, they also prevent much of the county from physically connecting to and benefiting from its riverfront. Structures along the riverbanks have literally turned their backs on the water, facing inward. As a result, little economic activity occurs along the riverbanks. Creating downtown vibrancy along the City of Binghamton's rivers should be a priority for injecting new vitality into the county's urban core and reconnecting Binghamton residents with the water.

5.5.1 Rock Bottom Whitewater Park

In 2006, Broome County, in collaboration with the City of Binghamton, completed a feasibility study drafted by McLaughlin Whitewater Design Group to evaluate the potential for the development of a Whitewater Kayak Park on the Susquehanna River. The park would be constructed along the northern banks of the river, extending approximately 300 yards, bypassing the Rock Bottom Dam to the Exchange Street Bridge in Binghamton. The primary purpose for exploring the feasibility of the Whitewater Park was two-pronged:¹⁰

- ◆ To explore the reconstruction of the poorly designed and unsafe Rock Bottom Dam
- ◆ To evaluate an opportunity to develop a unique outdoor recreation attraction in Broome County and the City of Binghamton

Conditions of Rock Bottom Dam

Rock Bottom Dam has long been considered a poorly designed component of the Susquehanna's river infrastructure. The existing structure, a lowhead dam, poses a danger to river users due to its strong undercurrents which can trap swimmers and flotation devices below surface and has even overturned motorboats. In 1975, during a rescue effort of two capsized rafts, three emergency personnel were subsequently drowned by the dam's undercurrent when their watercraft overturned and an additional four injured rafters and emergency personnel were pulled from the river. Subsequent similar tragic accidents have occurred at Rock Bottom Dam throughout its history.¹¹ In 1995, the City of Binghamton Mayor submitted legislation to prohibit watercraft on the Susquehanna from traveling within 600 feet of the dam due to the dangers it presents.¹² Additionally, the dam has had a detrimental environmental impact acting as a barrier to fish traveling upstream on the Susquehanna River for spawning.

¹⁰ powerpoint

¹¹ Elverum, Kim A., and Tim Smalley. "The Drowning Machine." 2008.

¹² <http://www.cityofbinghamton.com/viewarticle.asp?a=1133> 8/8/2005



Rock Bottom Dam on the Susquehanna

The whitewater park project would incorporate the reconstruction of Rock Bottom Dam to improve water safety for river users as well as rescue operations. The modification of the dam could also feature "fish ladders" which would enable aquatic species to swim upstream on the Susquehanna.¹³

Benefits of Rock Bottom Whitewater Park

Participation in paddle sports is among the fastest growing recreational activities, nationwide. In 2008, it was estimated that nearly 18 million people in the United States actively participated in some form of paddling recreation. Kayaking, specifically, has experienced tremendous growth since the mid-1990s. In 1994, it was estimated that 400,000 people in the United States were active kayakers. By 1999, that number had grown 425% to 2.1 million.¹⁴ Another decade later, in 2008, it was estimated that 7.8 million active kayakers could be found throughout the US. Those numbers continue to grow, especially as the sport becomes increasingly

¹³ Sanderson, Brian. "Possible Economic Benefits of Rockbottom Dam Whitewater Park in Binghamton, NY." May 2008. p.2.

¹⁴ <http://www.scumdoctor.com/fitness-tips/aerobic-exercises/kayaking/Kayaking-Statistics.html>

Broome County Intermunicipal Waterfront Public Access Plan

popular among the retiring baby-boomer generation. Paddle sports are a major portion of what has become a multi-billion dollar industry.

The construction of a whitewater park brings the potential of significant windfall for the Broome County economy and tourism industry. It is estimated that visitors will travel 100 miles to Binghamton for a day-trip visit to the whitewater park. According to a report on possible economic benefits of the Rock Bottom Whitewater Park, it is reasonable to expect that one percent of the total population over 16 years of age within 100 miles of Binghamton will visit the park at least once per year, on average. This figure is then applied to the estimated economic impact of \$75 - \$105 per day trip. Conservatively, the final economic impact of the Rock Bottom Whitewater Park would be between \$2.87 million and \$4.02 million annually on the Binghamton area. Additional economic impact can also be expected from potential overnight visitors to the whitewater park who travel further than 100 miles for extended stays, competitions and events. The economic impact of each overnight guest would be calculated at a rate of \$169/night.¹⁵

Table 8 Economic Impact of Rock Bottom Whitewater Park

Conservative Economic Impact Estimates	
Day-trip market Radius	100 miles
Annual Participation Rates	38,000 participants
Annual Economic Impact to Binghamton Area	\$2.87 - \$4.02 million

Source: "Possible Economic Benefits of Rockbottom Dam Whitewater Park in Binghamton, NY"¹⁵

According to the 2006 McLaughlin feasibility study for the Rock Bottom Whitewater Park, the lowest cost option that includes the construction of a whitewater park and modification to the Rock Bottom Dam to enhance safety and fish passage, would range between \$3 million and \$5 million.¹⁶ Considering the conservative estimates of the economic impact of the park, these costs would quickly recoup themselves through the benefit to the surrounding area. The next step for advancing the Rock Bottom Whitewater Park project includes the development of an engineering study to enter into the design phase of the project.

¹⁵ Sanderson, Brian. "Possible Economic Benefits of Rockbottom Dam Whitewater Park in Binghamton, NY." May 2008. p.2.

¹⁶ Broome County, NY. "A Joint Venture for the Development of Rockbottom Dam Whitewater Park." 2006.

5.5.2 Broome County Regional Farmers' Market

In 2009, the Broome County Department of Planning and Economic Development commissioned a study to evaluate the feasibility of a regional farmers' market to serve all of Broome County. A regional farmer's market, as opposed to a conventional, local farmers' market, would feature a far larger scope in both the vendors and goods provided, as well as the populations served. This type of market would feature more than 20 and up to several hundred vendors from the surrounding region and operate three to seven days per week. The market would have a permanent location, featuring structures with utility access and visibility from major traffic routes. Sales would be directed to retail customers from throughout Broome County, the Central New York Region, as well as wholesale operations to area institutions and businesses. The location proposed for the regional farmers' market is at Otsiningo Park on the Chenango River in the City of Binghamton. This is the site of an existing local farmers' market that would be expanded into a permanent, regional facility.¹⁷

A regional farmers' market would offer significant potential as an economic and tourist draw for Broome County. According to the 2008 projections in the feasibility study, such a market could potentially produce annual sales of more than \$4.5 million. Approximately 20% of those sales (\$910,325) are anticipated to come from tourists who live more than 25 miles from the market, representing direct expenditure impacts upon the local economy.¹⁸ The potential of a regional farmers' market in Broome County offers the opportunity for an environmentally friendly development along the area's waterways, while providing economic support for the county's agricultural industries.

¹⁷ Market Ventures, Inc. "Broome County Regional Farmers' Market Feasibility Study." August, 2011.

¹⁸ Market Ventures, Inc. "Broome County Regional Farmers' Market Feasibility Study." August, 2011.



Otsiningo Park hosts weekly Farmers Market



Regional Farmers' Market - Charlotte, NC

5.6 Branding the Riverway

Each asset of the Riverway economy will serve an important role to attract residents to enjoy their own community as well as visitors who will pump new dollars into local municipalities. In order to tie each of the key project recommendations in this chapter as well as existing assets together, a county-wide branding strategy should be developed and implemented to define the riverway and its attractions locally and promote them to visitors elsewhere.

5.6.1 Branding Strategy

The branding strategy should feature a collaboration of the county, its municipalities and stakeholder attractions throughout. The strategy should define the riverway as a major destination for outdoor recreational activities, featuring world-class fishing, sport rafting, kayaking, bicycling, snowshoeing, cross country skiing and wildlife observation. The brand should be marketed to outdoor enthusiasts within a half day's drive (250 miles), including Northeastern Pennsylvania, New York City, Albany, Syracuse and Rochester.

The branding strategy should include a combination of promotional and wayfinding elements that aim to achieve the following steps:

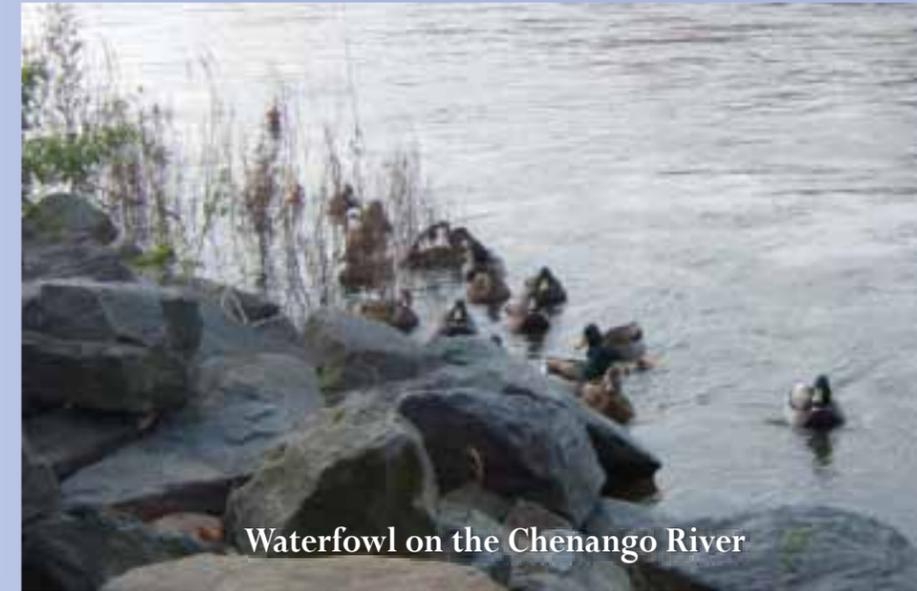
- ◆ Generate excitement and draw residents and visitors to the riverway
- ◆ Direct travelers to the riverway
- ◆ Orient visitors within the riverway
- ◆ Provide information about the riverway and direct users to visit other attractions

The primary promotional piece should be a quarterly riverway publication. Similar to tourism and heritage magazines found throughout New York State and the northeast, this piece should be developed to define a clear and exciting brand for riverway leisure and recreation in Broome County. The publication would highlight the county's many river-related attractions and update potential visitors on events occurring throughout the year.

A secondary key component to the branding strategy would be development of a wayfinding signage and information system. This would be a two pronged system to alert and direct travelers to the riverway and secondly to provide information about the riverway and its attractions in order to encourage users to visit additional attractions and potentially extend their stays in Broome County. The signage should include consistent design elements that allow viewers to immediately recognize it as a riverway sign. Signage directing travelers to the riverway should be located along major travel routes throughout Broome County and regional highways. Signage along the riverway will be more detailed in nature, and include wayfinding, directing users to attractions throughout the riverway. Interpretative signage would include specific information about its location, including river access points, local wildlife and landscape characteristics.

5.6.2 Moving Forward

Broome County's intersecting system of waterways presents a tremendous opportunity to develop a flourishing and sustainable riverway economy, based upon the unique assets of the county's lands. By connecting residents and visitors to the area's natural landscapes and water-based activities, Broome County can evolve into a unique destination that prides itself upon having among the best collection of outdoor recreation opportunities in the Northeast. The end result can be a county that benefits from a new brand in which its residents and visitors are integrated with a beautiful landscape, and a growing economy that does not impose its development upon the environment, but rather brings new stewards of the landscape to preserve it into the future.



Waterfowl on the Chenango River

6 Inventory & Analysis

6.1 Broome County River History

Broome County was originally inhabited by several different Native American tribes; the area was a crossroads between the Iroquois, Delaware, and Susquehannocks (Andastes). By the time of European settlement, the area was dominated by the Iroquoian tribes. The rivers served as important transportation corridors both on land and water. Short portages provided access from the Susquehanna watershed to other surrounding watersheds including the Mohawk, Delaware, and Ohio via the Alleghany River. The rivers were key to Iroquois expansion in the late 17th century.

During the Revolutionary War, four of the six Iroquois nations sided with the British, but the Oneida and Tuscarora sided with the Colonists. In 1779, the Sullivan-Clinton Expedition traveled down the Susquehanna River in order to destroy Iroquois villages along the Susquehanna and Chemung River valleys in retaliation for their part in the war. Several villages were destroyed within Broome County. Ironically, these tribes were sympathetic to the Colonists.

In 1836, the Chenango Canal was built along the Chenango Valley. The Canal connected Binghamton to the Erie Canal System at Utica and led to a manufacturing and building boom throughout the valley. It was the first reservoir-fed canal system in the United States and was considered an engineering marvel for its time. An extension of the canal along the Susquehanna River, begun in 1840, was meant to connect Binghamton and the Chenango Valley to the coal fields of Pennsylvania. However, railroads led to the decline of the canal era and the extension was only completed as far as Vestal. The Chenango Canal was in operation until 1878. It eventually fell into disrepair and was filled-in in many places. The exact route of the canal was recently surveyed. Any construction taking place along the route requires an archeological investigation. Portions of the canal may eventually be nominated for the National Register of Historic Places. The Summit portion in Bouckville has already been designated as a national historic district. The canal prism and Lock #107, north of Chenango Valley State Park, are also a designated national historic district.

In 1935 and 1936, widespread flooding occurred in the Susquehanna and Chenango Valleys, prompting construction of flood control measures during the 1940's and 50's. Flood control measures, which included dams, levees, and flood walls were designed to reduce the damage from flooding events 20% greater than the floods of the 1930's. Despite these flood control measures, catastrophic floods in 2004, 2006 and 2011 caused major devastation.

6.2 Land Use

6.2.1 Existing Land Uses

This section presents a broad overview of land uses throughout the county, as well as the issues associated with each. An analysis of the types of land uses is important because each presents different issues regarding access, public safety, and the environment. Data for the analysis is from the Broome County parcel database and uses the New York State Real Property System (RPS) land use classifications, which breaks land uses into nine categories. Table 9 summarizes the land uses in the study area. The values do not include public right-of-ways for roads or the waterways.

Table 9– Summary of Study Area Land Uses

Land Use	Acres	Percent
Residential	10,213	29.2%
Vacant	7,726	22.1%
Agriculture	4,932	14.1%
Wild/Forest	2,887	8.3%
Recreation	2,712	7.8%
Industrial	1,282	3.7%
Community Service	2,206	6.3%
Commercial	2,075	5.9%
Public Service	599	1.7%
No Data	363	1.0%

Source: Broome County and peter j. smith & company, inc.

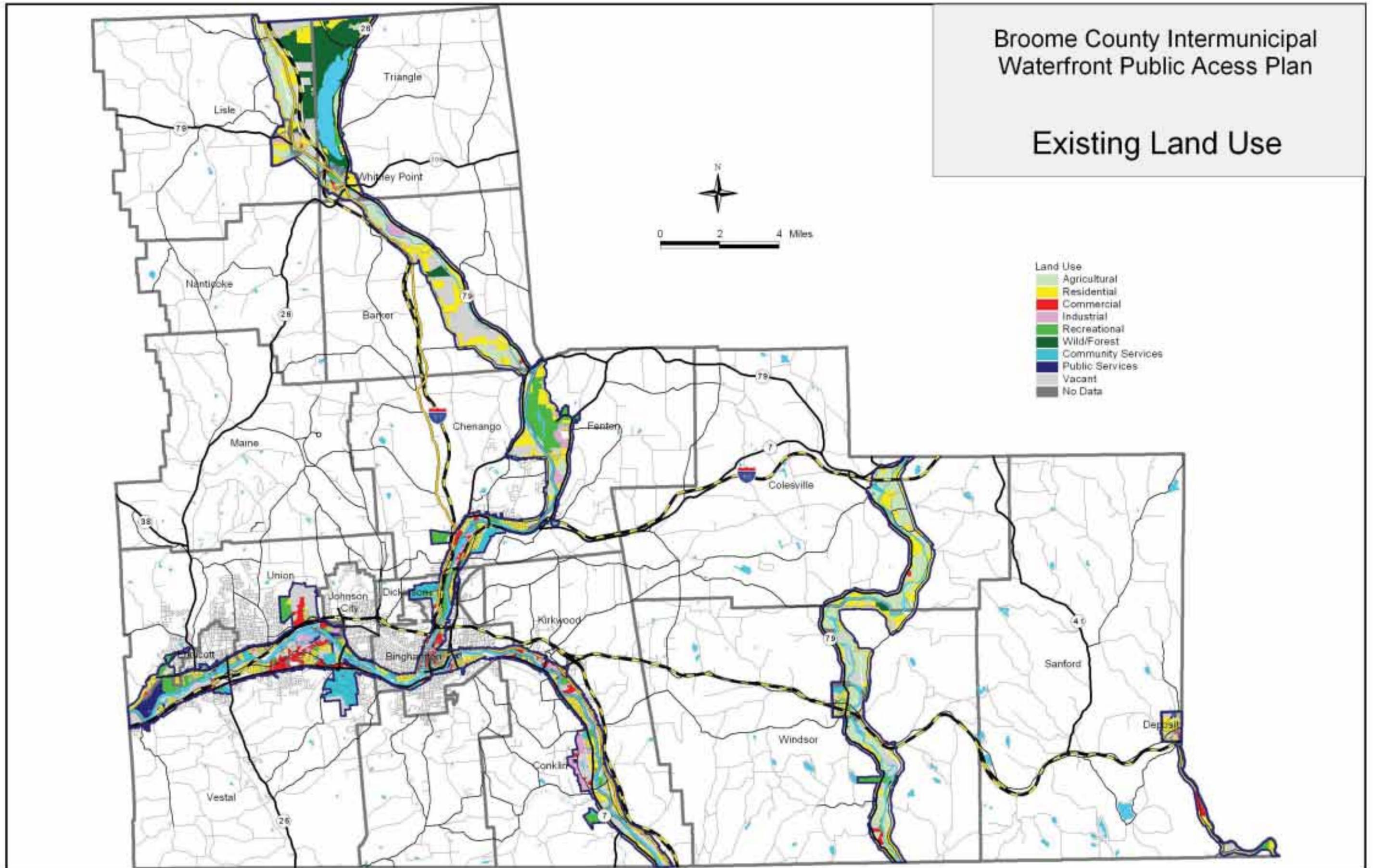
Figure 12 - Existing Land Use (right)

Source: Broome County Planning Department and peter j. smith & company, inc.

peter j. smith & company, inc.

Broome County Intermunicipal Waterfront Public Access Plan

Existing Land Use



Residential

The residential land use category includes all types of residential land uses from high density apartment complexes and mobile home parks to single-family homes to rural residential properties where a single residence occupies large lots of land. Nearly a third of the study area (29.2%) is occupied by residential uses. Residential uses are present throughout the study area, but clusters of residential uses are found in the villages of Lisle, Whitney Point, and Endicott, and in the towns of Chenango and Conklin. In the City of Binghamton, residential uses are concentrated along Riverside Drive and Conklin Avenue. Residential uses located on the riverfront itself are found in the towns of Conklin, Windsor, Dickinson, Chenango, and Vestal, and along Riverside Drive in the City of Binghamton. Residential properties are nearly always privately-owned and limit public access. Easements will need to be acquired in order to establish a riverfront trail in these areas. Another issue with waterfront residential properties is that they are likely susceptible to flooding and risk large monetary losses. Large lot residential properties located on the waterfront are found in the towns of Barker, Colesville, Sanford and Windsor. With these lots, easements may be easier to obtain and flooding may not threaten residential structures depending on where they are located on the lot.

Vacant

Vacant property offers a variety of potential. Some vacant properties are already publicly-owned. Privately-owned vacant parcels may be easier to acquire. It is also easier to obtain easements on vacant land. Much of the vacant land in this area is wooded which reduces runoff. Nearly a quarter of the study area is vacant. Most vacant land is found in the more rural towns like Barker, Conklin, Kirkwood, and Windsor. There are also large areas of vacant land along Old Vestal Road in Vestal and along the waterfront in Endicott.



Image from hotpads.com

Area Housing Stock

Agricultural

Agricultural land makes up 14.1% of the study area. Agricultural land poses a threat to water quality not only in Broome County, but the entire Susquehanna watershed. Pesticides and animal waste from agricultural activity can run off into the river. This problem has already been identified and buffers are being established to reduce the problem. Agricultural lands are privately-owned, but easements are easier to obtain, especially since buffers are being created. Most agricultural land is found in Colesville, Windsor, and Lisle.



Farmland near the Village of Windsor

Wild/Preserved

Land that is devoted to conservation is designated as wild/preserved. These are likely publicly-owned lands, but could also include privately-held land that qualifies for tax benefits for being kept undeveloped. Access through these land uses is likely. Wild/preserved land makes up 8.3% of the study area. The Whitney Point Wildlife Management Area (WMA) is the largest area of this land use category.

Recreational

Parks make up the majority of recreational uses, although private sports clubs and picnic facilities are included in this category. Parks within the study area provide public access to the waterfront and often provide facilities for water-related activities. Recreational land uses account for 7.8% of the study area. The largest parks along the waterfront are Chenango Valley State Park in Fenton, Otsiningo Park in Dickinson, and a series of parks along the waterfront in Endicott. There are also several waterfront parks located in Binghamton, Johnson City, Conklin, and Kirkwood. Other towns also provide waterfront parks.



Industrial

Industrial land uses include manufacturing facilities and quarry operations. Access to industrial land uses may be limited to due to safety hazards. Quarry operations make up a large part of the industrial uses in the study area. Quarry operations near the edge of the river can have significant impacts on environmental quality; the riverbank between the quarries and the river can erode causing the river to change direction. These mass wasting events can introduce tons of sediment into the river. Ecosystems further upstream can be destabilized as the river works to fill in the holes from the quarry operation. The largest industrial areas are found in Vestal, Chenango, Fenton and Barker, all of which are mining operations. There are various manufacturing facilities scattered throughout the rest of the study area, but few of them are located along the waterfront.

Community Services

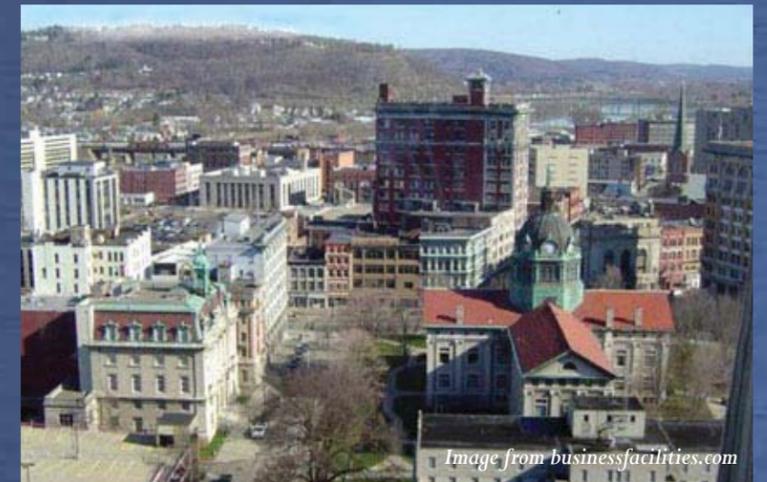
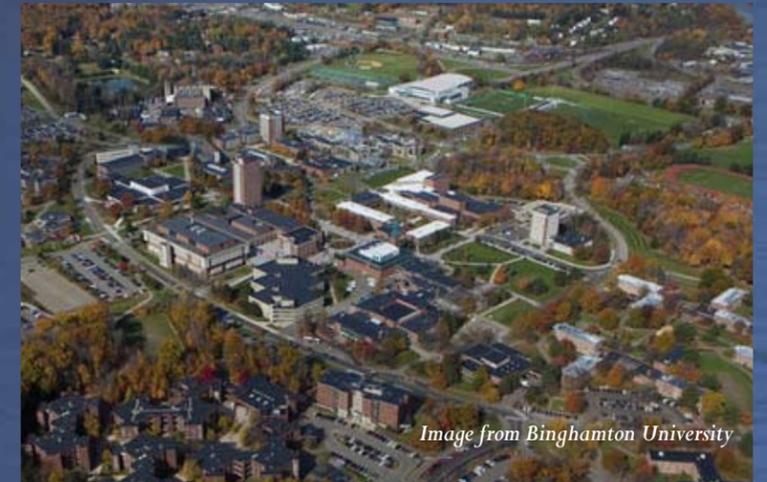
Community Services include educational institutions, government facilities, medical facilities, and religious establishments. While not all publicly-owned, these facilities are likely to contribute to the overall waterfront access plan by providing easements and waterfront facilities for the public good. Community service establishments are often destinations in an access management plan. Binghamton University and Broome Community College account for most of the land in this category. Other community service uses are found throughout the study area, but are mainly concentrated in the Binghamton-Union-Vestal area.

Commercial

Commercial uses include professional and office spaces as well as retail sales and service establishments. Commercial uses are privately-owned. Commercial owners are more likely than residential owners to grant easements because there is less of a privacy issue and the establishments may benefit by allowing public access through their property. In many cases, commercial establishments will build facilities for waterfront access or contribute to a large plan for waterfront access. Commercial uses make up 5.9% of the study area; these are concentrated in downtown Binghamton, along Vestal Parkway in Vestal, along Main Street in Union and Endicott, and along Upper Front Street in Chenango. Individual commercial establishments are also scattered throughout the study area.

Public Services

Public services are land uses dedicated to providing utilities and transportation services. These uses include electrical substations, wastewater facilities, pumping stations, and airports. These facilities could be either private or publicly-owned. Obtaining access through these properties is not often a problem, but they may present an obstacle for safety reasons. There are few public service land uses located within the study area. The Tri-Cities Airport west of Endicott is the largest public service facility. This parcel, owned by the Village of Endicott, also contains athletic fields for recreational use. The wastewater treatment facilities located in Endicott and Vestal are along the waterfront and may present a challenge to continuous waterfront access.



6.2.2 Existing Zoning and Land Use Regulations

Zoning regulations dictate the type of future land uses that can be developed in a given district. Zoning districts often coincide with existing land uses. Setback requirements, building heights, landscaping requirements, signs, parking standards, and performance standards are also regulated by zoning ordinances. Zoning ordinances can also be used to require buffer areas and visual access. The study area is comprised of 21 municipalities, each with their own zoning regulations, which are not consistent. This section will give a broad overview of zoning districts within the study area. Zoning districts are generalized into main land use categories. There is no zoning data for the towns of Lisle and Triangle. This section will also discuss observations that were obtained through review of available zoning ordinances.

General District Distribution

Most of the study area is zoned for agriculture or rural residential development. Agricultural uses and large residential lots are the dominant form of development in these zoning districts. Nearly all of the land in the towns of Barker, Colesville, Sanford, and Windsor are zoned for low density uses.

Residential districts permit multi-family dwellings and single-family dwellings on smaller lots. The largest area of residential districts in the study area is found in the City of Binghamton. Most of the areas in the villages are also zoned for residential uses.

The largest area of commercial zoning districts is located in the downtown area of the City of Binghamton. Commercial districts in Binghamton allow for mixed and residential uses. Vestal Parkway in the Town of Vestal is also zoned primarily for commercial uses. Commercial uses along this corridor are more auto-oriented than in the city. There are also commercial districts located in each of the villages and in various other locations throughout the study area.

There is a considerable amount of land in the study area that is zoned for industrial use. Most industrial districts also allow a variety of commercial uses. The largest contiguous area zoned for industrial use is located in

Vestal. The Town of Union, including villages, has a few areas zoned for industrial use. The Tri-Cities Airport is included in the industrial zoned area. Conklin and Kirkwood also have large areas along the river set aside for industrial uses. The Town of Fenton has several industrial zoned areas. The villages of Deposit, Whitney Point and Windsor have small areas set aside for industrial development.

Some towns have areas zoned for open space or conservation. These areas are located where there are existing parks or cemeteries.

Land Use Regulation and Waterfront Access

None of the zoning codes reviewed contain provisions for a buffer along the edge of the river(s). A buffer would preclude the construction of structures within a given distance from the water's edge. A buffer would also make it possible for the location of a riverfront trail. Easement would still have to be acquired, but there would be no structures in the way of trail development. Zoning codes could also mandate the provision of a trail section for all new developments. This would be a long term approach to the development of a trail in a piecemeal fashion.

Some zoning ordinances contain provisions for the development of structures within the flood zone, either with a dedicated district or an overlay. Municipalities that do not have such provisions within their zoning code have a separate ordinance for development within the flood zone. The provisions for flood damage mitigation are similar throughout the county. All new residential structures built within a flood prone area must have the lowest floor elevated above the highest flood level. Non-residential structures must be designed so that water can flow through floors constructed below the flood level. These provisions make development within the flood zone more costly. Over the long run, these provisions will assist in creating a riverway along the waterfront.

Table 10 – Existing Zoning

General Zone	Acres	Percent
Agriculture/Rural	18,407	58.3%
Residential	6,338	20.1%
Commercial	2,874	9.1%
Industrial/Mining	3,053	9.7%
Open Space/Conservation	235	0.7%
Special Districts	689	2.2%

Source: Broome County and peter j. smith & company, inc.

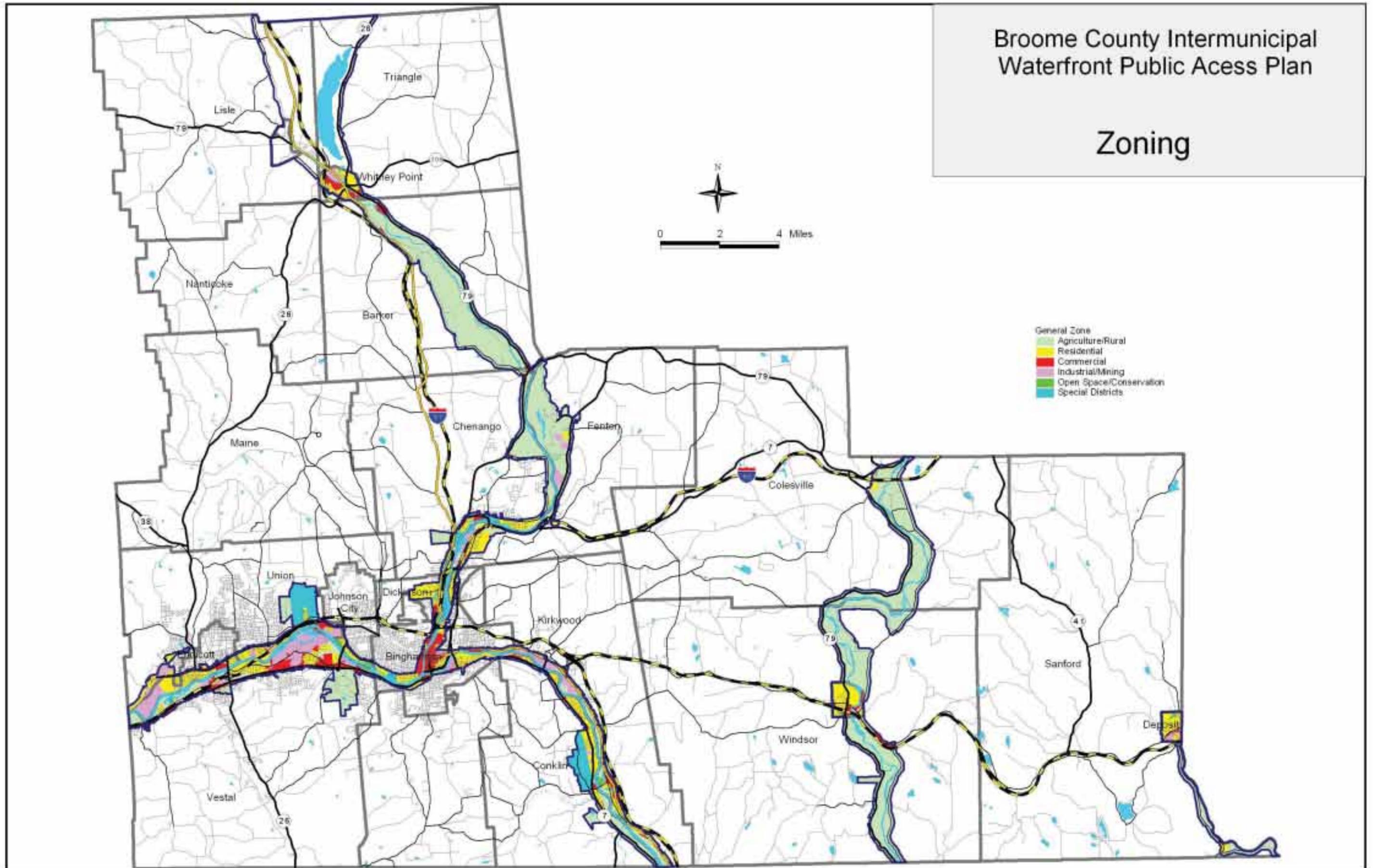
Figure 13 - Zoning (right)

Source: Broome County Planning Department and peter j. smith & company, inc.

peter j. smith & company, inc.

Broome County Intermunicipal Waterfront Public Access Plan

Zoning



6.2.3 Land Ownership Patterns

Land ownership has a direct affect on access to the waterfront. Access can be provided easily on parcels that are publicly-owned. Some publicly-owned parcels already provide access to the waterfront. Privately-owned parcels will require the acquisition of easements to get access to the water for a waterfront trail. Land ownership was obtained from the county's parcel database. Publicly-owned parcels are presented in the figure at right. The largest area of publicly-owned land is the Whitney Point Wildlife Management Area. It surrounds the Whitney Point Reservoir. Fishing and boating access is offered at the reservoir. Another large area of publicly-owned land is the Chenango Valley State Park in the Town of Fenton. Although the park is adjacent to the Chenango River, the park is not focused on access to the river. Otsiningo Park provides waterfront access in the Town of Dickinson and into the Town of Chenango. Nearly the entire shoreline of the Village of Endicott is publicly-owned. Much of the shoreline in the Town of Union is also either publicly-owned or in the Route 17 (I-86) right-of-way. In the City of Binghamton, the southern shoreline is mostly publicly-owned or in the Vestal Parkway right-of-way. The shoreline surrounding the northwest quarter of the city is primarily privately-owned. In Vestal, some parcels along the shoreline are publicly-owned and a large area is in the Rt.17 (I-86) right-of-way. In Conklin and Kirkwood there are several non-contiguous parcels that are publicly-owned. In the towns of Windsor, Colesville, Sanford, Chenango, Lisle, and Barker, there are few publicly-owned parcels along the riverfront.



Riverwalk along the Chenango, Binghamton

6.2.4 Underwater Land

According to Public Lands Law, Section 75, land underneath water is the sovereign property of the State of New York and administered by the Office of General Services. However, upland owners have riparian rights to the water. Any construction that requires the use of the land underneath the water (including piers and bulkheads) requires a permit from the Office of General Services for the use of such lands. All construction activities along the rivers are subject to review and authorization from the US Army Corps of Engineers and permit authorization from the NYS DEC. Environmental review may also be required. These requirements also apply to development upland that may have an effect on the water or shoreline.

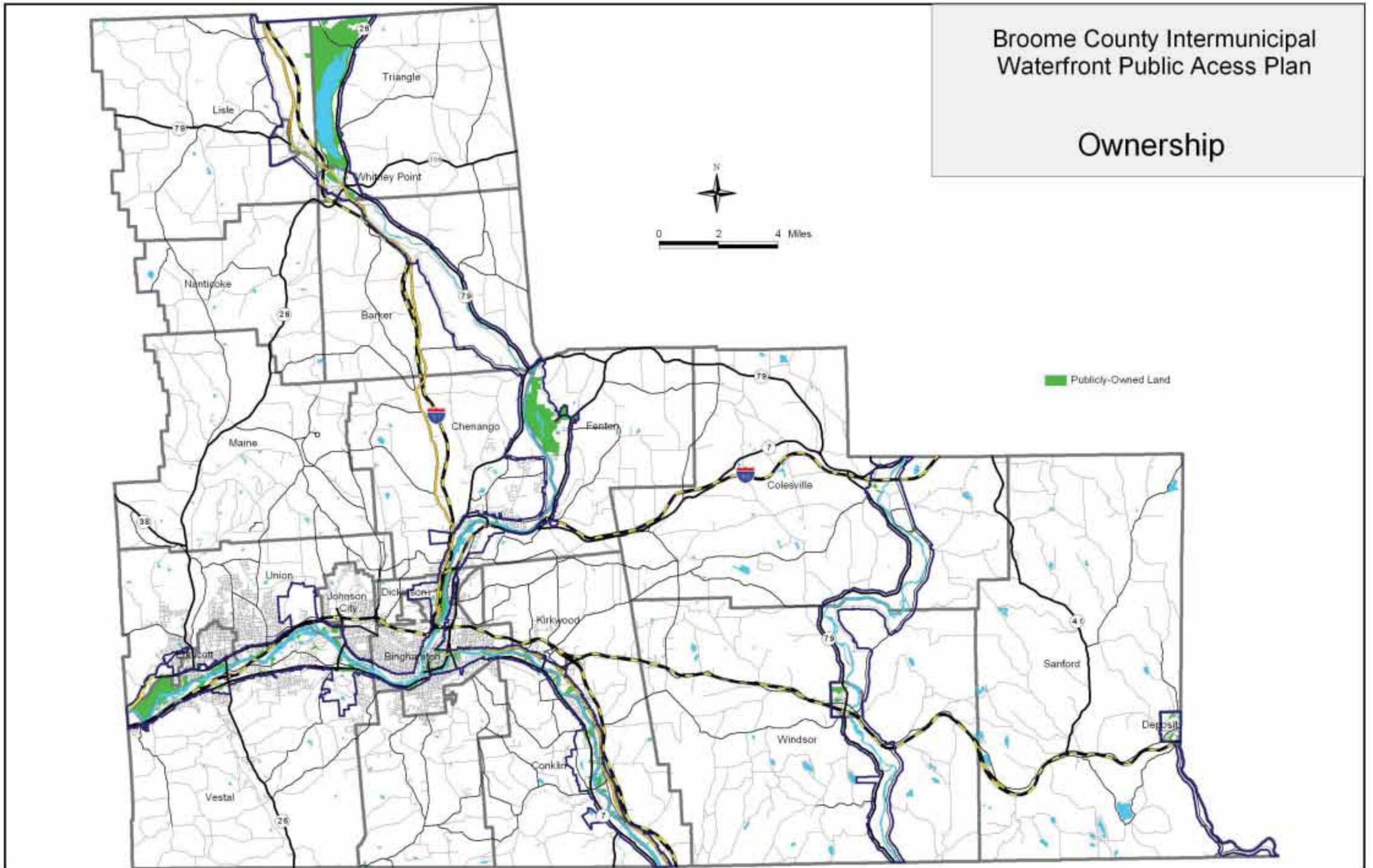


Figure 13 - Land Ownership (right)

Source: Broome County Planning Department and peter j. smith & company, inc.
peter j. smith & company, inc.

Broome County Intermunicipal Waterfront Public Access Plan

Ownership



6.3 Water & Water Conditions

6.3.1 Water Uses

The waters of Broome County can be used for a variety of activities. Navigating the rivers with a motorized boat is one possibility, but the water level is often too low and their range is limited in some areas by dams and other obstacles. Non-motorized boats, such as canoes, kayaks, and row boats, are a more favorable method of transportation. Fishing is a popular activity, whether from the shoreline or from a boat. Smallmouth bass, northern pike, walleye, muskellunge and tiger muskie are popular species for fishing in local waterways. Swimming and splashing around for relief from the heat is another use for the waters in Broome County. Whitney Point Reservoir has a dedicated swimming area. The Susquehanna River is used as a source of drinking water for the City of Binghamton.



Image from paddling.net

There are limits to the uses of water. Levels are generally low in many places, limiting watercraft with deeper drafts. During wetter periods, the water current poses a danger to all recreational users. High flow rates also affect the quality of water for drinking. There are a series of dams located along the Susquehanna River. These dams create a river depth that favors boats with deeper draft, but limits the area in which they can travel. For paddlers in canoes and kayaks the dams have to be bypassed via portages. Sewer pipes that cross the river also create obstacles for boaters.

6.3.2 Flooding and Flood mitigation

The Headwaters of the Susquehanna have a history of flooding. In 1935 and 1936, flooding caused widespread damage. The floods led to the Flood Control Act of 1936, amended in 1938. The act allocated funds for projects that would reduce the flooding damage. Construction of a dam on the Otselic River was one major project to come out of the Act. The dam, which controls 16% of the drainage area upstream of Binghamton, created the Whitney Point Reservoir. It also provides water downstream

during dry periods. A dam was also built in East Sidney, controlling 5% of the drainage area. Other projects funded by the Flood Control Act of 1936 and subsequent flood control acts are:

- ◆ Binghamton - (completed in 1943) Construction of 22,200' of earthen levees and 13,100' of flood walls, channel excavation to increase capacity
- ◆ Endicott/Johnson City/Vestal - (completed in 1961 and rehabilitated in 1977) Construction of 7½ miles of earthen levees and 2,796' of flood walls, channel excavation and relocation and establishment of five pumping stations.
- ◆ Port Dickinson - (completed in 1949) Removal of abandoned dam foundation, excavation of shoals, and overbank clearing
- ◆ Conklin/Kirkwood – (completed in 1955) Channel improvements and removal of shoals and islands
- ◆ Lisle - (completed in 1948) Construction of 4,150' of earthen levees and 970' of flood walls, 5,700' of channel relocation
- ◆ Whitney Point - (completed in 1952) Construction of 7,000' of earthen levees and 1,800 feet of channel realignment

In 2006, flooding again caused widespread damage even with these measures in place. As a result, the Federal Emergency Management Agency (FEMA) reassessed the flood hazard area. Areas once considered to be protected by the flood control measures are now included in the 100 year flood plain. Figure 14 shows the flood areas before the reassessment and the additional areas added after. FEMA also established a Hazard Mitigation Grant Program, which funds the buyout of damaged properties; the land is then used for public open space in perpetuity. Properties acquired through the buy-out program as also shown in Figure 14. The program creates opportunities to increase facilities for river access and reduces the risk of damage from flooding.

Figure 14 - Flood Hazards and Mitigation Measures (right)

Source: Broome County Planning Department and peter j. smith & company, inc.
peter j. smith & company, inc.



Image from thehockeyblog.com



Image from thehockeyblog.com

2006 Flooding, Binghamton

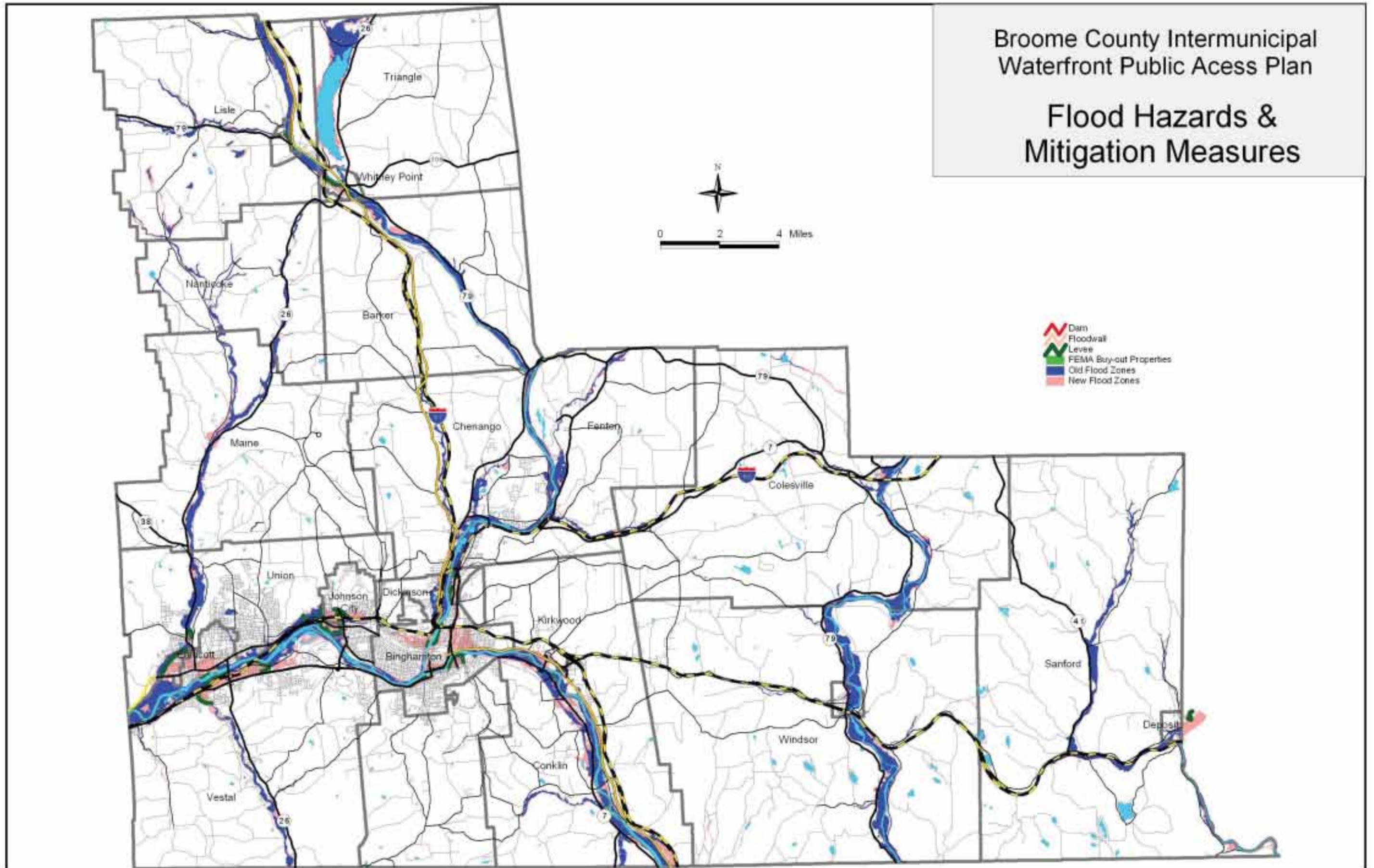


Image from thehockeyblog.com

2006 Flooding, Conklin

Broome County Intermunicipal Waterfront Public Access Plan

Flood Hazards & Mitigation Measures



6.4 Environmental Considerations

6.4.1 Wetlands

The US Army Corps of Engineers protects wetlands under Section 404 of the Clean Water Act, irrespective of their size. The Chenango, Delaware West Branch, Tioughnioga and Susquehanna Rivers as well as Whitney Point Reservoir, as underwater lands, are protected by the Corps as federal wetland areas. Land masses within the rivers are also included.

New York State's Freshwater Wetlands Act of 1975 was enacted to protect wetlands of 12.4 acres or larger. Other than the waterways themselves there are a few NYS DEC-regulated wetlands in the study area. These are located in the Whitney Point WMA, Chenango Valley State Park and the towns of Union, Vestal, Fenton, and Conklin. A permit is required for construction on these sites, but recreation uses are not regulated.

6.4.2 Topography

Broome County generally has a hilly terrain ranging in elevation from 805-2,040 feet. Around the rivers, the topography becomes much more level. The study area lies primarily within the valleys. There are some areas where hills are located right up against the edge of the river. Where this happens, the slope can be very steep. Trail construction in these areas will require additional engineering considerations. Steep slopes at the river's edge are encountered in the Village of Endicott at Roundtop Park, east of the Route 201 bridge in the Town of Vestal, near the Pennsylvania border in the Town of Conklin, south of Chenango Valley State Park in both the Town of Fenton and the Town of Chenango, west of Chenango Valley State Park in the Town of Chenango, and in various locations in the Town of Barker. At the edge of the river, the bank usually rises between 10-20 feet. The steep banks make it difficult to get access to the river with a vehicle. It is also difficult to build structures on the bank to improve access. While most of the year water levels are low, there are times when river levels reach the height of the bank. Non-secure structures could be damaged or lost during these events.

Figure 15 - Wetlands and Topography (right)

Source: NYS DEC, USGS, New York Water Science Center and peter j. smith & company, inc.

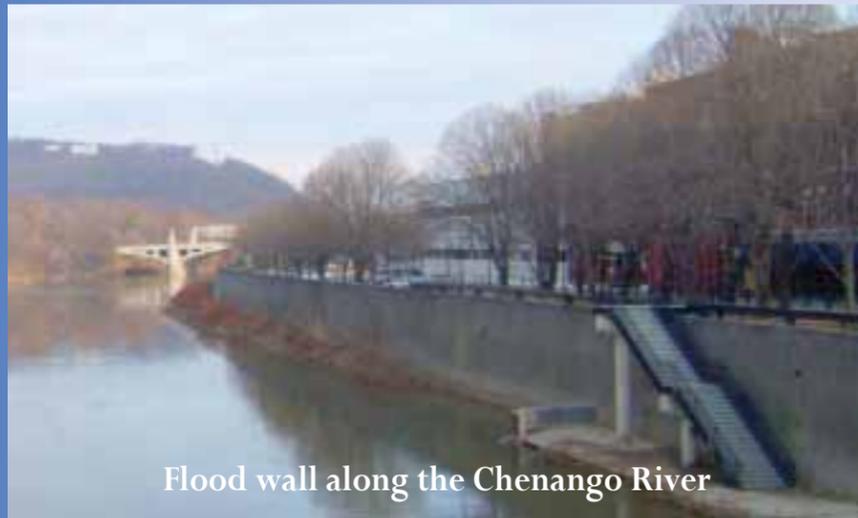
peter j. smith & company, inc.

6.3.3 Shoreline Conditions

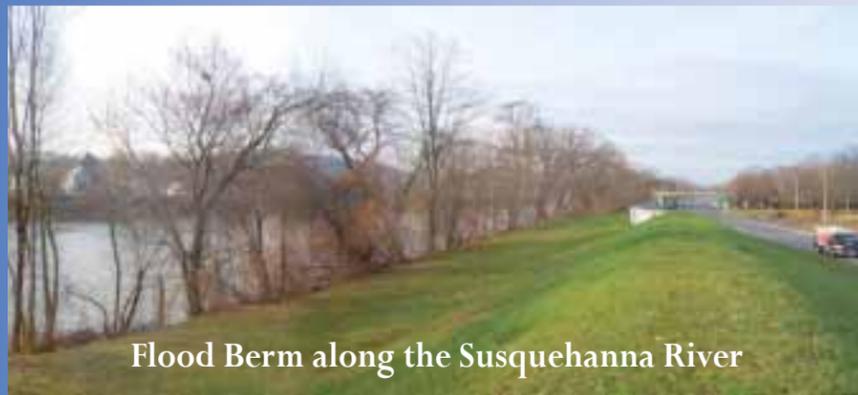
Due to the flood control projects, the shoreline of the rivers is highly engineered in many places; flood walls are the most dramatic alteration. Both flood walls and levees create obstacles to viewing the rivers from a distance. Some shorelines have been fortified with rip-rap; while this protects the shoreline from erosion, it detracts from the natural character of the river's edge. The remainder of the shoreline maintains a more natural state. In most areas the banks of the rivers are bordered by vegetation. Even in developed areas, a wooded buffer is maintained along the rivers' edge. The trees help stabilize the shoreline, but can also create a visual barrier to the river. However, when viewing the river from a viewing area, the trees mask surrounding development and create a natural viewshed.

6.3.4 Water Quality

Water quality is periodically monitored by the DEC. The section of the Susquehanna River from south of Veterans River Park in Kirkwood to the Broome-Tioga county line is designated by the NYS DEC as a Class A river, meaning its highest and best use is as a source for public drinking water. The City of Binghamton and some surrounding areas receive their drinking water from this portion of the river. The Delaware West Branch is also a Class A river. A reservoir just upstream from the Village of Deposit supplies drinking water to the New York Metropolitan Area. The Chenango, Tioughnioga, and Otselic rivers, and the portion of the Susquehanna upstream of Veterans River Park are Class B waterways; the highest and best uses for these rivers are for recreation, including boating and fishing. The water quality in Broome County is generally considered satisfactory. There are concerns about point source pollution from combined sewer outfalls. Traces of mercury pose a threat to water quality and have caused an advisory for fish consumption, which limits the amount of fish that should be consumed in a given time period. Atmospheric deposition is thought to be the source of mercury. There is a general statewide advisory for all freshwater fish of no more than one meal per week. Other non-point sources of pollution, such as oil, fertilizer, heavy metals, and sediments, also pose a threat to water quality. The use of the rivers as a drinking water supply and for recreation suggest additional protection efforts are appropriate.



Flood wall along the Chenango River



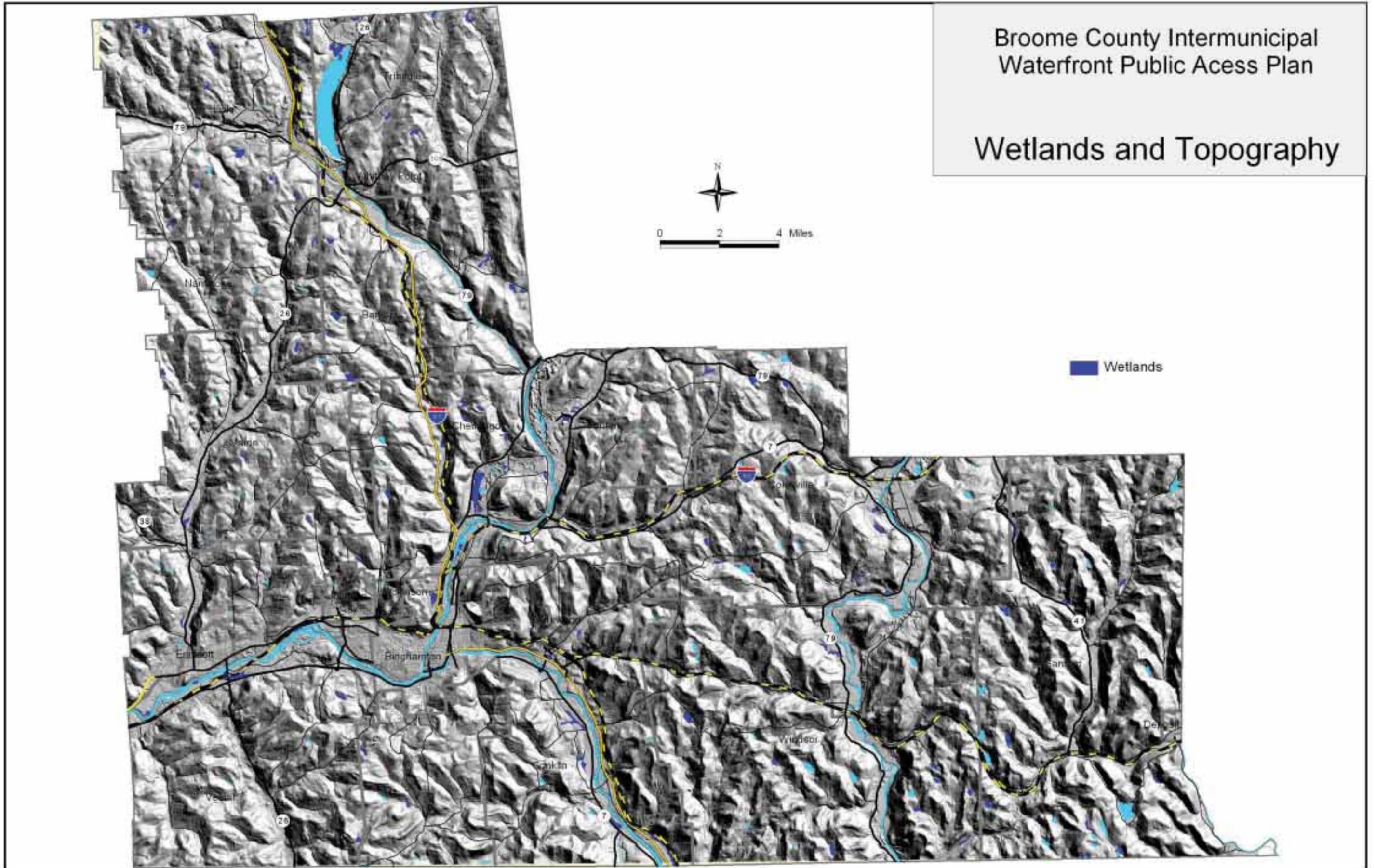
Flood Berm along the Susquehanna River



Chenango River adjacent to Downtown Binghamton

Broome County Intermunicipal
Waterfront Public Access Plan

Wetlands and Topography



6.4.3 *Agricultural Land*

Agricultural land is an important resource for the production of food. Agriculture also makes a substantial contribution to the local economy. Farmland should be preserved and efforts should be made to make farming a viable industry. Farmland also contributes to the scenic character of a community. Preserving this character should be consistent with the goals of waterfront public access. There are nearly 10,900 acres of land in the study area that are in county-approved agricultural districts. These agricultural lots are primarily located in the towns of Windsor, Colesville, Barker and Lisle. There are smaller areas in the towns of Chenango and Fenton.

6.4.4 *Mineral Resources*

Broome County sits over a portion of the Marcellus Shale. Marcellus shale has been found to contain large quantities of natural gas. Under Broome County, Marcellus shale deposits are the thickest, offering the potential for the greatest yields of natural gas. Capturing the natural gas requires a technique known as horizontal drilling and hydraulic fracturing. In New York State, the environmental impact of this technique is still being investigated. There are concerns that chemicals used in the process could make its way into the ground water. The technique also requires large amounts of water which need to be held in tanks or impounded. Some of the water is pumped back when finished, but the water then has to be disposed of in an environmentally safe manner. The water used for this procedure would likely be pumped from the rivers. Widespread drilling would deplete the amount of water flowing in the rivers, which can be low at times on its own. If hydraulic fracturing is determined to be safe, Broome County stands to gain a large share of wealth through taxation of these operations. Drilling leases have already been granted throughout the county. The increased revenue could help fund improvements necessary for waterfront access.



Drill Rig used for Hydraulic Fracking

6.4.5 *Significant Fish and Wildlife Habitats*

Significant fish and wildlife habitats are designated by the New York State Department of State and were originally created to preserve areas where the wildlife is endangered or of unique importance. Once designated as a significant habitat by the Department of State, the designated land or water area is monitored by the Department of State to ensure that proposed developments within the general area do not disturb the existing character and quality of the habitat. There are no designated significant fish and wildlife habitats in Broome County.

6.4.6 *Wildlife Management Areas*

The Whitney Point Multi-use Area is a Wildlife Management Area (WMA) maintained by the NYS DEC and Broome County. The WMA was created following the construction of a dam on the Otselic River which created a 1,200 acre reservoir. The WMA covers a total of 4,157 acres and extends from the Village of Whitney Point to the Village of Cincinnatus in Cortland County. Wildlife management activities have included timber harvest, mowing, construction and maintenance of small marshes adjacent to the Reservoir, erection of nesting structures for birds, and the construction and maintenance of public access facilities. Hunting is excellent with an abundance of deer, turkey, rabbits, squirrels and waterfowl. In addition, pheasants are stocked throughout the season.

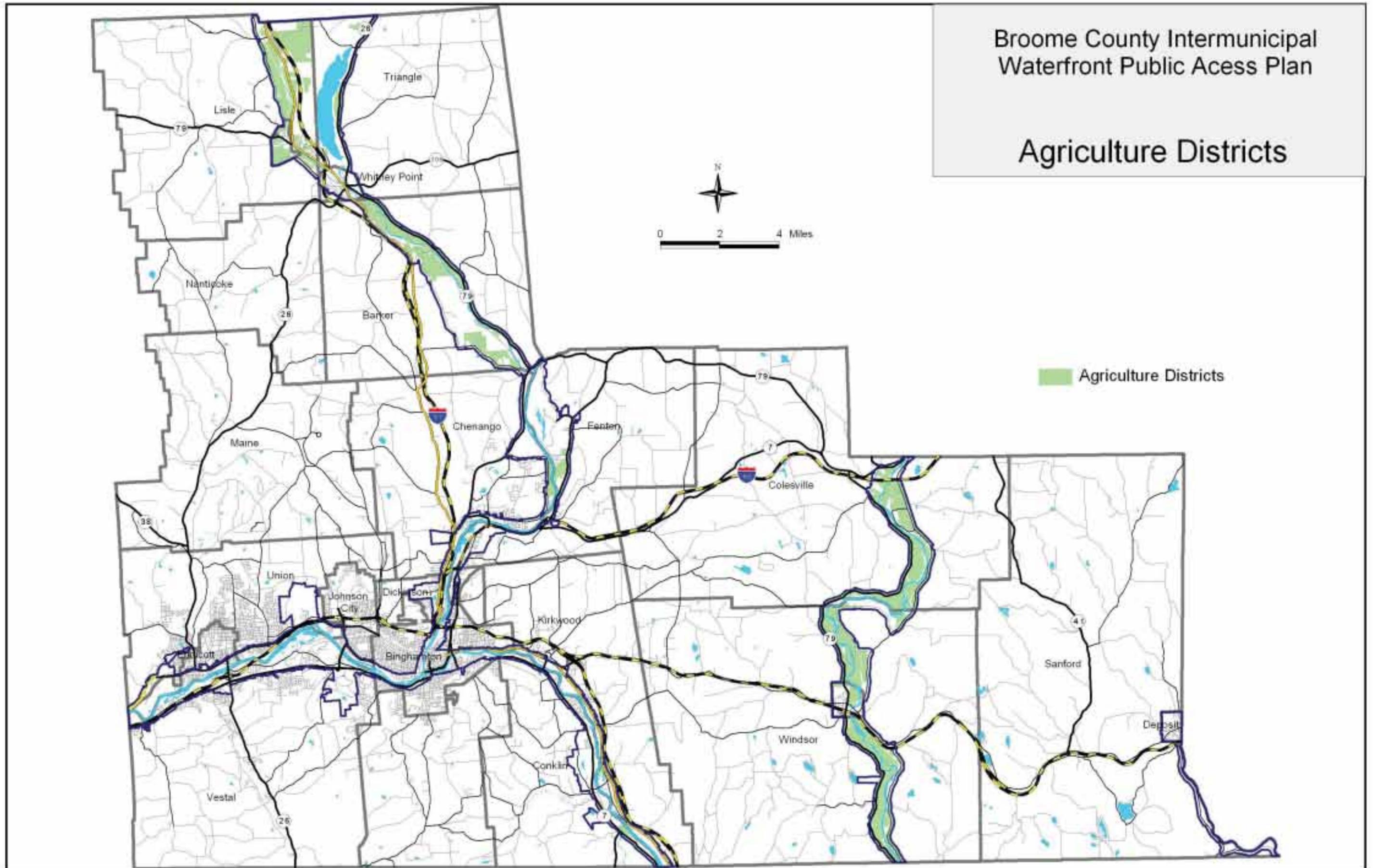
The reservoir is a prime fishing spot with largemouth and smallmouth bass, walleye, crappie, sunfish, yellow perch, channel catfish, and bullhead. Ice fishing for white crappie is a popular winter activity. Boating is permitted on the reservoir, but there is a 25 horsepower outboard motor restrictions and 10 mph limit.

Figure 16 - Agriculture Districts (right)

Source: NYS Dept. of Agriculture and Markets and peter j. smith & company, inc.
peter j. smith & company, inc.

Broome County Intermunicipal Waterfront Public Access Plan

Agriculture Districts



6.4.7 Hazardous Waste Sites

Superfund Sites

A Superfund site is an area designated by the US Environmental Protection Agency (EPA) where uncontrolled or abandoned hazardous waste is located, possibly affecting local ecosystems or people. The EPA provides funding for the sites' clean-up. There are five Superfund sites in the study area, all of which have undergone the clean-up process. Some are still being monitored for contamination. These Superfund sites are located in the study area:

Table 11 – Study Area Superfund Sites

Facility	Location	Town	Status
Bec Trucking	Stewart Road	Vestal	Removed from Priority List
Endicott Village Well Field	S. Grippen Avenue	Endicott	Cleanup Completed, ongoing monitoring
National Pipe & Plastics	Old Vestal Road	Vestal	Removed from Priority List
Vestal Water Supply Well 1-1	Pumphouse Road	Vestal	Cleanup Completed, ongoing monitoring
Vestal Water Supply Well 4-2	Prentice Road	Vestal	Removed from Priority List

Source: United States Environmental Protection Agency

National Pollutant Discharge Elimination System (NPDES)

Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming, and other activities. The National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into US waters. Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. Since its introduction in 1972, the NPDES program is responsible for significant improvements to the nation's water quality.

Table 12 – Facilities that Require NPDES Permits

Facility	Location	Municipality
AES Westover	720 Riverside Drive	Johnson City
Endicott WPCP	40 Anson Road	Endicott
Binghamton/Johnson City WWTP	4480 Old Vestal Road	Vestal

Source: United States Environmental Protection Agency

Air Emissions Sites

The EPA has set national air quality standards for six common air pollutants. These include carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter (also known as particle pollution), and sulfur dioxide. The EPA tracks emissions from facilities that are existing sources of air pollution, including how much of each pollutant (or the pollutants that form them) is emitted. The EPA works with local agencies and these facilities to reduce the emission of these pollutants. Table 13 lists facilities that are sources of air pollution in the study area.

Table 13 – Study Area Sources of Air Pollution

Facility	Location	Municipality
AES Westover	720 Riverside Drive	Johnson City
SUNY Binghamton	Vestal Parkway East	Vestal
ANITEC Image Corp Property	McDonald Ave at Trout Brook Outfall	Binghamton

Source: United States Environmental Protection Agency

Toxic Release Inventory

The Toxics Release Inventory Program compiles data on toxic chemical releases and waste management activities, as reported annually by certain industries and federal facilities. Toxic releases include on- and off-site disposal of toxic substances. These substances are monitored to ensure they do not pose any threat or are rendered safe. The following is a list of toxic releases reported in the last year.

Table 14 – 2009 Study Area Toxic Release Reports

Facility	Location	Town/Village
AES Westover	720 Riverside Drive	Johnson City
ExxonMobil Oil Corp Binghamton Terminal	3301 Old Vestal Road	Vestal
Eco International	200 Stage Road	Vestal
Hess Vestal Terminal	440 Prentice Road	Vestal
Control Concepts	328 Water Street	Binghamton
Crowley Foods	145 Conklin Avenue	Binghamton
BAE Systems Controls	600 Main Street	Johnson City
Eastern Electronic Devices Inc	350 Broome Industrial Parkway	Conklin
Ebonex Inc	305 Court Street	Binghamton
Lander Co	141 Chenango Street	Binghamton
Dover Electronics Co	498 Conklin Avenue	Binghamton
Sheltered Workshop For The Disabled Inc	200 Court Street	Binghamton
Mcintosh Lab	2 Chambers Street	Binghamton
CAE Link Corp Flight Simulation Division	Broome Industrial Park	Binghamton
Triple Cities Metal Finishing	4 Nowland Road	Binghamton
Penguin Group USA	1 Grosset Drive	Kirkwood
Matco Technologies	151 Court Street	Binghamton

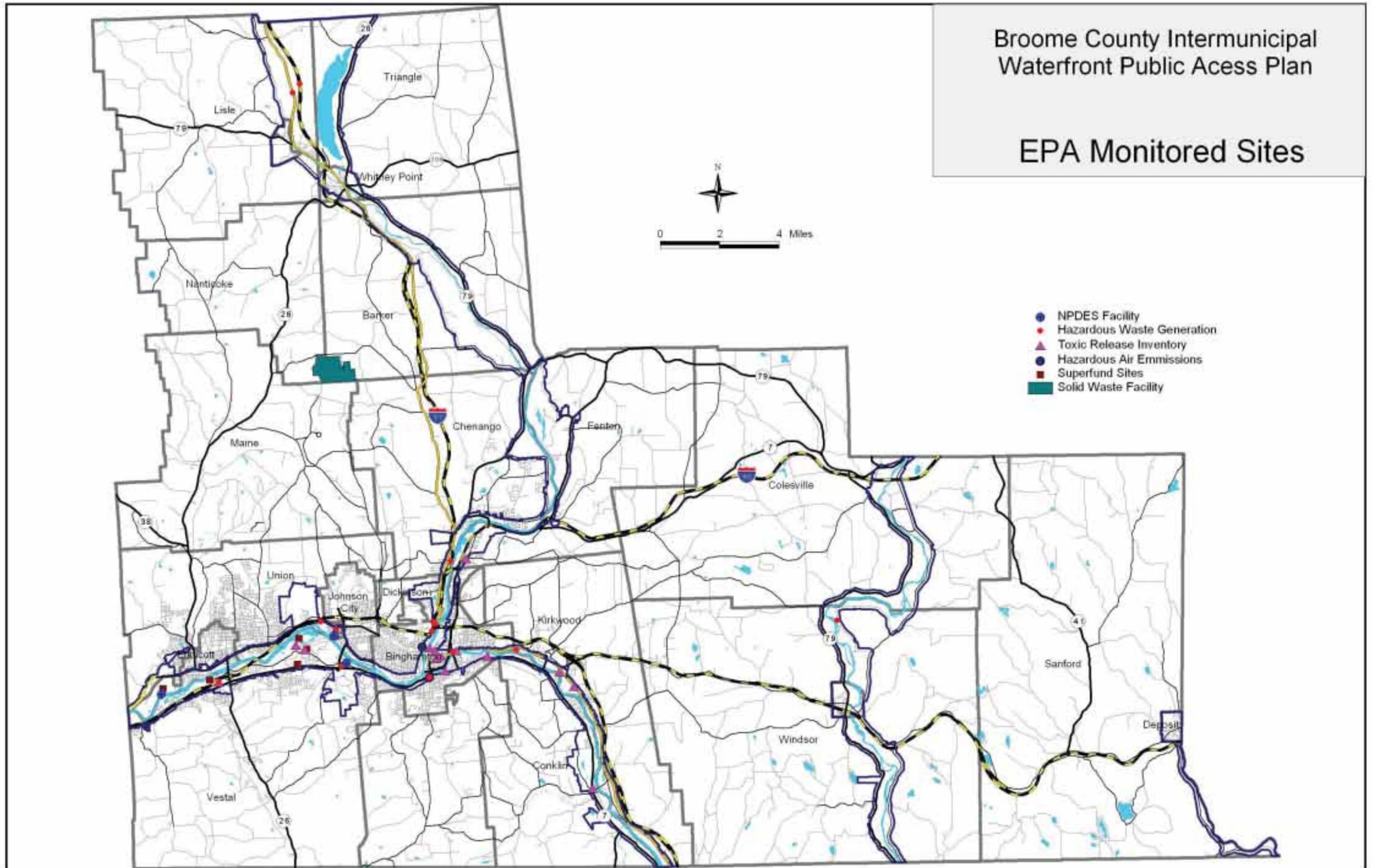
Source: United States Environmental Protection Agency

Figure 17 - EPA Monitored Sites (right)

Source: US EPA and peter j. smith & company, inc.
peter j. smith & company, inc.

Broome County Intermunicipal Waterfront Public Access Plan

EPA Monitored Sites



6.5 Recreation and Public Access

6.5.1 Parks

Many parks in Broome County provide public access to the waterfront. Some of the parks have facilities designed for public access such as boat launches or fishing areas. Even if there are no specific facilities, the parks provide access to the water for fishing from the shoreline. The following is a list of parks in Broome County that have waterfront access. There are a few parks within the study that are not listed because they are not adjacent to the water. These parks are still displayed on the parks and recreation map and should still be considered part of an overall riverway system.

State Parks

Chenango Valley State Park: Chenango Valley State Park, in the Town of Fenton, is a 1028-acre state park centered around two kettle lakes. The park features an 18-hole golf course. The park has cabins and campsites for overnight stays. The park has features of historic interest, such as a Civilian Conservation Corps museum and the Chenango Canal. There are over 13 miles of trails for hiking and cross-country skiing. River Road/Towpath Trail runs along the Chenango River for three miles continuing northward beyond the boundaries of the park to Chenango Forks. There are swimming facilities and a boat launch on the lakes, but no designated facilities for launching boats on the Chenango River.

County Parks

Dorchester Park: This 70-acre county park is located on NYS DOT land in the Town of Triangle. The park is along the Whitney Point reservoir and offers swimming, a boat launch and boat rentals. Fishing is permitted from the shore or from boats. Ice fishing is also permitted. A trail meanders over the dam connecting the park to Whitney Point High School.

Otsiningo Park: Otsiningo Park is a 150-acre riverside county park. The park offers 3.4 miles of bicycle and pedestrian trails as well as athletic fields and picnic facilities. The river bank is mainly wooded, but there are areas of clearing where the Chenango River is readily visible. Fishing can be accomplished by walking through the woods down to the river bank.



Otsiningo Park, Binghamton

Roundtop Park: Roundtop Park is a modern 30-acre park with picnic facilities. Sitting atop a hill, the park offers tremendous views of the Susquehanna River Valley. A steep wooded hill separates the park facilities from the edge of the river.

Grippen Park: Located in the Village of Endicott, this 19-acre park offers athletic fields and picnic facilities. A hard-surfaced boat launch is also available at the park.

Community Parks

Binghamton Riverwalk: The Binghamton Riverwalk is a 1.5-mile walkway along the entire length of the Chenango River in the City of Binghamton. The walk connects Confluence Park with Cheri Lindsey Park and is planned to be part of a larger system connecting Otsiningo Park to Rock Bottom Dam and beyond.

Boland Park: Boland Park is a 38-acre park located in Johnson City underneath the Route 201 Bridge. The park features playing fields, a walking trail, and a boat launch. The shoreline is primarily wooded.

Castle Gardens Park: Castle Gardens Park is a small neighborhood park that serves the Castle Garden subdivision. Adjacent to the park are 40 acres of fields and ponds, with an access road to the Susquehanna River.

Cheri Lindsey Park: Cheri Lindsey Park is a 10-acre park connected to the Riverwalk. The park features a skate park and athletic fields. A dog park is currently being constructed as well. Cartop boat launching is possible from the base of the levee.

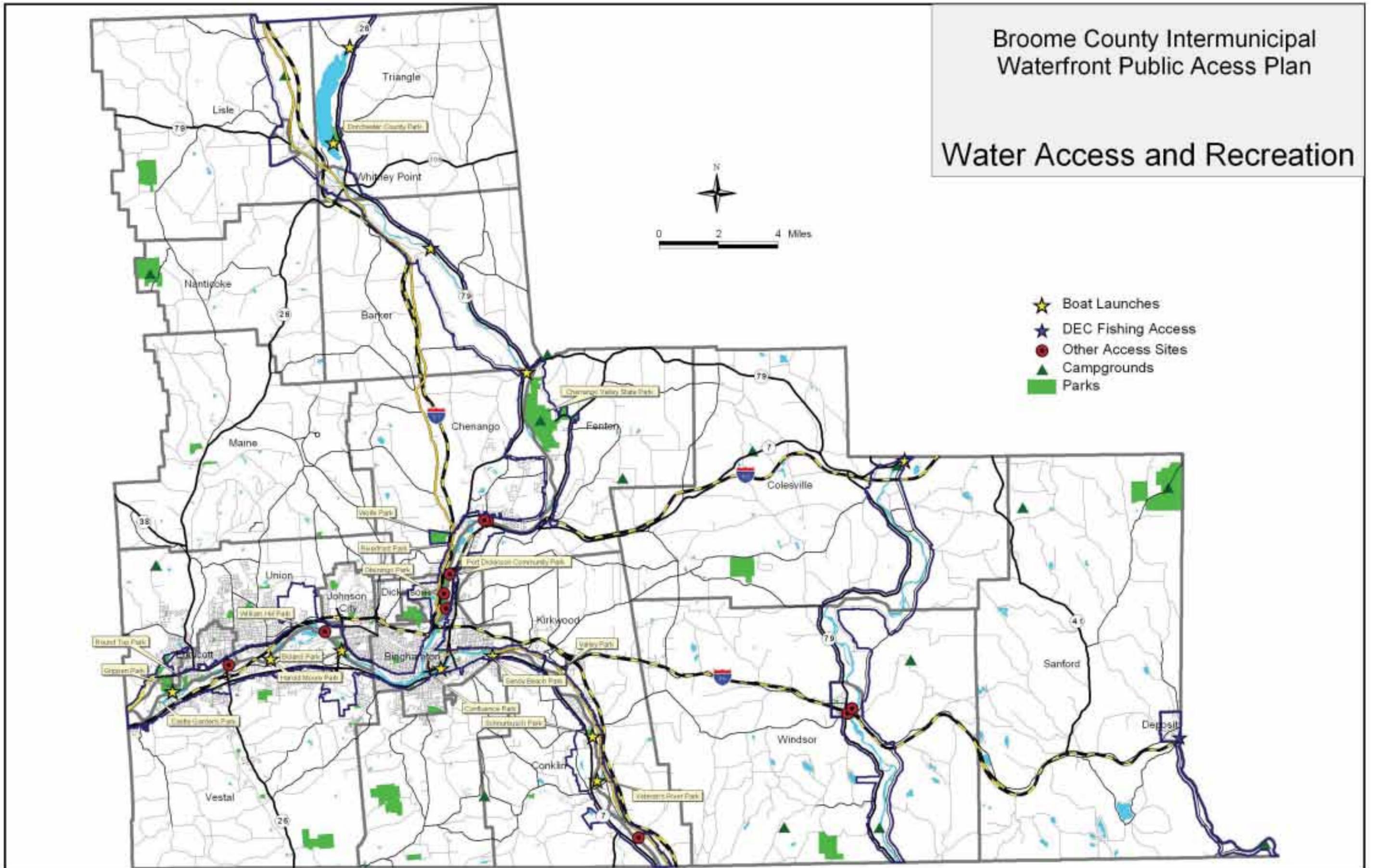
Confluence Park: Confluence Park is a plaza located at the confluence of the Chenango and Susquehanna Rivers in downtown Binghamton. The park has a small walking loop with several benches for relaxation. There is a viewing platform that offers a tremendous view of the confluence and the valley. The park is connected to the Riverwalk and the pedestrian bridge across the Susquehanna River. Fishing is possible from the rip rap shoreline that surrounds the park.

Figure 18 - Water Access and Recreation (right)

Source: DEC, HeadwatersRivertrail.org and peter j. smith & company, inc.
peter j. smith & company, inc.

Broome County Intermunicipal Waterfront Public Access Plan

Water Access and Recreation





Schnurbusch Park, Town of Conklin

En-Joie Park: En-Joie Park is a wooded strip of land along the Susquehanna River in the Village of Endicott. There are parking facilities for fishing access and a clearing where boats can be launched. The park provides nearly a half mile of riverfront access.

Harold Moore Park: Harold Moore Park is a 15-acre park in the Town of Vestal. The park offers athletic fields and a large parking area. There is waterfront access for fishing and a hard surfaced boat ramp.

Mersereau Park: This park provides over a half mile of riverfront access in the Village of Endicott. The park has a trail along the top of the levee.

Port Dickinson Community Park: This 17-acre park on the Chenango River has walking trails along the water, athletic fields and picnic facilities.

Riverfront Park: Riverfront Park, or Otsiningo North, is in the Town of Chenango. The park has four soccer fields, access to the river for fishing, and a trail that is connected to the Otsiningo Park trail.

Sandy Beach Park: Located on Conklin Avenue in the City of Binghamton, this park provides waterfront access and has a hard surfaced boat launch.

Schnurbusch Park: This park is 24 acres in the Town of Conklin. It has playing fields, picnic facilities, a pool and a hard surfaced boat ramp.

Southside Park: This park offers a half mile of river access on the south side of the Susquehanna River in the City of Binghamton. It is connected to the Riverwalk by the pedestrian-only South Washington Street Bridge.

Veterans River Park: Veterans River Park is a 27-acre park in the Town of Kirkwood. The park has 3 pavilions, playing fields, and walking trails. There is a boat launch for small watercraft such as canoes.

Valley Park: This 10-acre park in the Town of Kirkwood is frequented by walkers, joggers, and runners of all ages because of its paved and lighted track. It also features playing fields, basketball courts and a playground. Access to the Susquehanna River is possible via Stanley Hollow Creek.

William Hill Park: William Hill Park is a 13-acre park located in the Town of Union. The park has playing fields and picnic facilities. The park provides fishing access along the riverbank.

Wolf Park: This scenic park in the Town of Chenango consists of 182 acres of hiking and nature trails. It offers year-round activities such as cross country skiing, snowshoeing, bird-watching.

6.5.2 Boat Launches

Table 15 lists the publicly-maintained boat launches in Broome County; some of these are located in parks. Hard surface ramps allow for motorized watercraft that are launched from trailers. Hand launches only allow for watercraft that can be carried to the water such as kayaks and canoes.

Table 15 – Study Area Boat Launches

Water	Community	Location	Type	Parking	Agency
Susquehanna River	Binghamton	At Sandy Beach Park located on Route 7.	Hard surface ramp	8 cars and trailers	Municipal
Susquehanna River	Binghamton	At Rock Bottom Dam located off Route 363, 1/2 mile above the confluence of Susquehanna and Chenango Rivers.	Hard surface ramp	5 cars and trailers	Municipal
Susquehanna River	Conklin Center	At Leo Schnurbusch Park located on Route 7.	Hand Launch	6 cars	Municipal
Susquehanna River	Endicott	At Grippen Park located off Route 17C.	Hard surface ramp	10 cars and trailers	Municipal
Susquehanna River	Johnson City	At Route 201 bridge.	Hand launch	15 cars	DEC
Susquehanna River	Kirkwood	At Kirkwood Park downstream of the Route 314 bridge.	Hard surface ramp	6 cars and trailers	Municipal
Susquehanna River	Nineveh	At county bridge in Hamlet of Nineveh.	Concrete ramp	8 cars and trailers	DEC
Susquehanna River	Vestal	At Harold Moore Park located on Old Vestal Road.	Hard surface ramp	10 cars and trailers	Municipal
Tioughnioga River	Chenango Forks	At Route 12 bridge.	Hand launch	6 cars	DEC
Tioughnioga River	Itaska	On Route 79.	Hand launch	6 cars	DEC
Whitney Point Reservoir	Dorchester Park	Off Route 26, 1 mile north of the Whitney Point Reservoir Dam.	Hard surface ramp	40 cars and trailers	DEC
Whitney Point Reservoir	Triangle	County Route 13.	Gravel ramp	8 cars and trailers	DEC

Source: NYS Department of Environmental Conservation

Broome County Intermunicipal Waterfront Public Access Plan

6.5.3 Fishing Access

The NYS DEC maintains some parking areas designed for fishing access to the rivers. There are several DEC fishing access points located in and around the Village of Deposit. Other fishing access points are located at the following locations:

- ◆ Main Street in Whitney Point
- ◆ Doolittle Road Bridge in Ouaquaga
- ◆ Jennings Rd Bridge in Killawog
- ◆ Nineveh Bridge in Nineveh
- ◆ Chenango Bridge in Chenango

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

6.5.4 Additional Access Sites

In addition to the access sites above, the Upper Susquehanna Coalition has identified several sites where access to the river is possible or desired:

- ◆ Chapel Street Bridge in Windsor
- ◆ Route 17 Bridge in Windsor
- ◆ Gorman Road in Kirkwood
- ◆ En-Joie Park
- ◆ William Hill Park
- ◆ Port Dickinson

6.5.5 Outfitters

There are two outfitters located in Broome County. Outfitters rent canoes and kayaks as well as other equipment needed for paddling and camping trips.

6.5.6 Campgrounds

There are 14 campgrounds located in or near Broome County that are available to the public. Campgrounds provide visitors with overnight accommodations as well as other amenities. The five campgrounds located on the waterfront provide long distance water travelers with a place to stay overnight along their journey. All campgrounds require reservations. There are no designated open public camping facilities.

Table 16-Campgrounds on River

Name	Address	Location
Chenango Shores	190 Chenango Shores Ln.	Chenango Forks
Chenango Valley SP	State Park Rd.	Fenton
Enchanted Gardens	2975 NYS Route 7	Harpurville
Pine Crest	280 NYS Route 79	Windsor
West Branch Angler Resort	150 Faulkner Rd.	Hancock

Source: Multiple Sources

Table 17 -Campgrounds not on River

Name	Address	Location
Belden Hill	1843 NYS Route 7	Harpurville
Charles Kark	53 Winn Hill Rd.	Port Crane
Forest Lake	574 Ostrander Road	Windsor
Greenwood Park	153 Greenwood Rd.	Nanticoke
Indian Trail	263 Piece Creek Road	Conklin
Kellystone	51 Hawkins Rd.	Nineveh
Lakeside	336 Hargrave Road	Windsor
Oquaga Creek SP	5995 County Route 20	Bainbridge
Pine Valley	600 Boswell Hill Road	Endicott

Source: Multiple Sources

Table 18 - Outfitters

Name	Address	Location
Enchanted Gardens	2975 NYS Route 7	Harpurville
Lighthouse Landing	3782 Route 11	Marathon

Source: Multiple Sources



Cabin #19, Chenango Valley State Park

6.6 Public Infrastructure

6.6.1 *Water*

Public water is provided in the urban areas and villages of Broome County (Figure 19). There is no consolidated county water authority. The City of Binghamton gets the majority of its public water from the Susquehanna River. The water is treated by a recently renovated water treatment plant. The quality of the water delivered to the residents exceeds EPA standards. Using the Susquehanna River as a source of water for the city has a small effect on the water level of the river. The water usage is minor compared to the overall volume of water that flows through the city, but it may present an issue during dry seasons when water usage is higher. The city also has a backup well to supply water, but the well contributes less than one percent of the water supply. All other public water providers in Broome County derive their water from ground water wells. All public water providers have exceeded EPA standards for water quality. In the Village of Endicott, there is concern that toxic waste from an old IBM plant spill could seep into the ground water. The wells that draw the water are equipped with aeration towers capable of removing volatile compounds and Endicott's water has also tested safe. In rural areas of the county, water is obtained through private on-site wells.

6.6.2 *Sanitary Sewer*

Sanitary sewer systems are provided to most of the areas that are served by public water (Figure 20 shows extent of sanitary sewer systems based on data from the Broome County Real Property Services (RPS) database). Wastewater entering these sanitary sewer systems is treated at sewer treatment plants before being discharged into the waterways. There are several wastewater treatment facilities located along the rivers in Broome County. The largest facilities are located on Vestal Road at the foot of Murray Hill Road and on Anson Road in the Village of Endicott. Binghamton and Johnson City have combined stormwater and sanitary sewer systems. While these systems treat stormwater, they can overflow during periods of heavy rain, discharging untreated effluent into the river. The occasional overflow causes concern for the water quality in the Susquehanna River. In rural areas, private septic systems are used for

wastewater elimination. A high concentration of septic systems could affect ground water resources.

6.6.3 *Stormwater*

Except in Binghamton and Johnson City, stormwater is conveyed through Separate Stormwater Sewer Systems (MS4s). This means that stormwater does not go into the sanitary sewer system and stormwater flows back into the water courses untreated. Non-point source pollution contaminants, such as fertilizers and pesticides from farming operations and grease and oil from cars, can be carried by rain water runoff into MS4s and eventually into the waterways. Outfall locations from the stormwater sewer system are shown on Figure 21.

6.6.4 *Solid Waste*

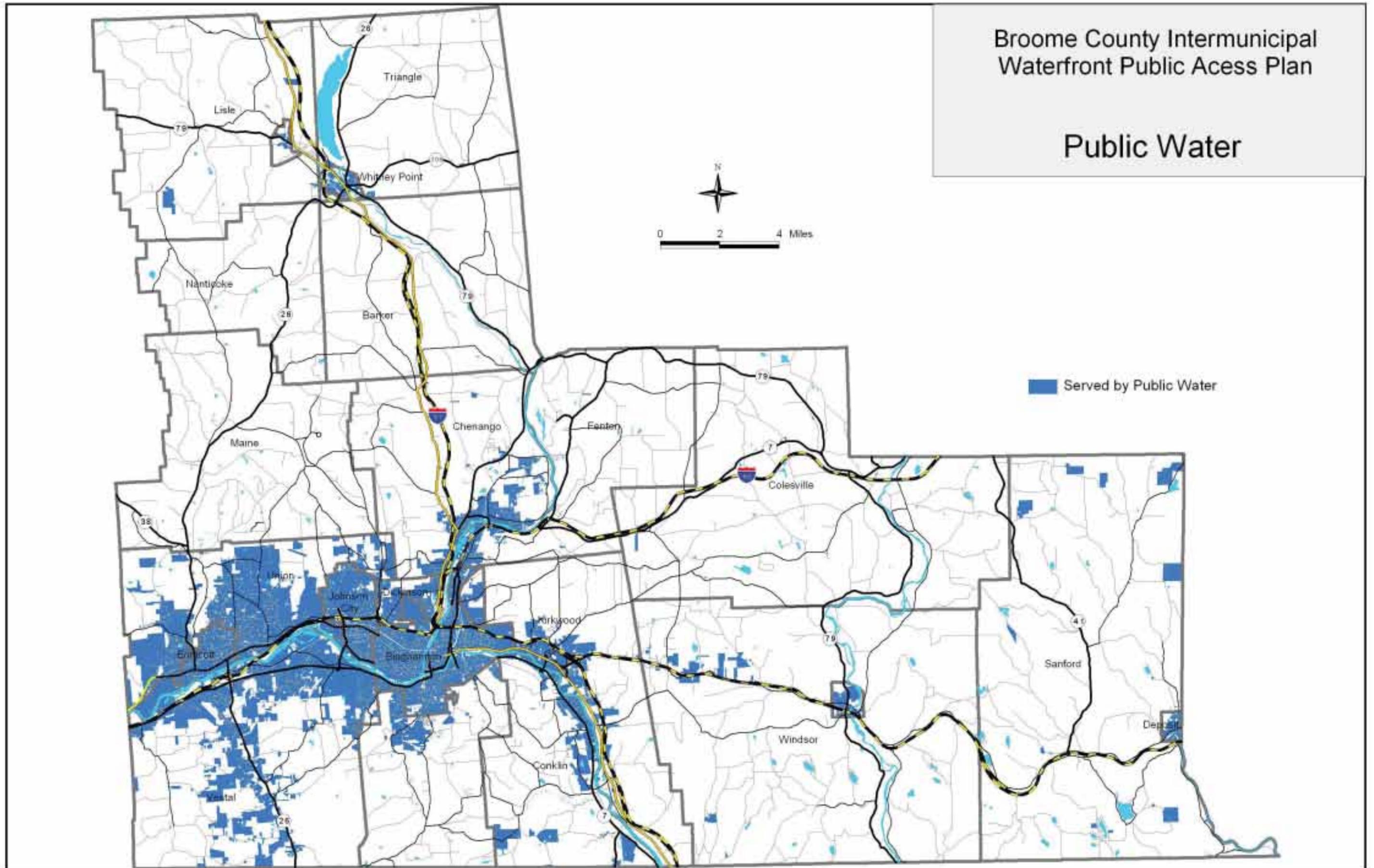
Solid waste is collected by a variety of public and private collectors and is delivered to the Broome County landfill. The landfill is a state of the art facility and meets the needs of the residents of the county. The landfill is located on Knapp Road outside of the study area. There is an old solid waste site located in the Village of Endicott adjacent to the Susquehanna River and Nanticoke Creek; the site was a Superfund site that has since been remediated. In addition, the riverfront area that now includes Binghamton Plaza, Colonial Plaza and parts of Cheri Lindsey Park was used as a municipal waste landfill for the City of Binghamton in the 1950s; an incinerator was also located on the site.

Figure 19 - Areas Served by Public Water (right)

Source: Broome County Planning Department and peter j. smith & company, inc.
peter j. smith & company, inc.

Broome County Intermunicipal Waterfront Public Access Plan

Public Water

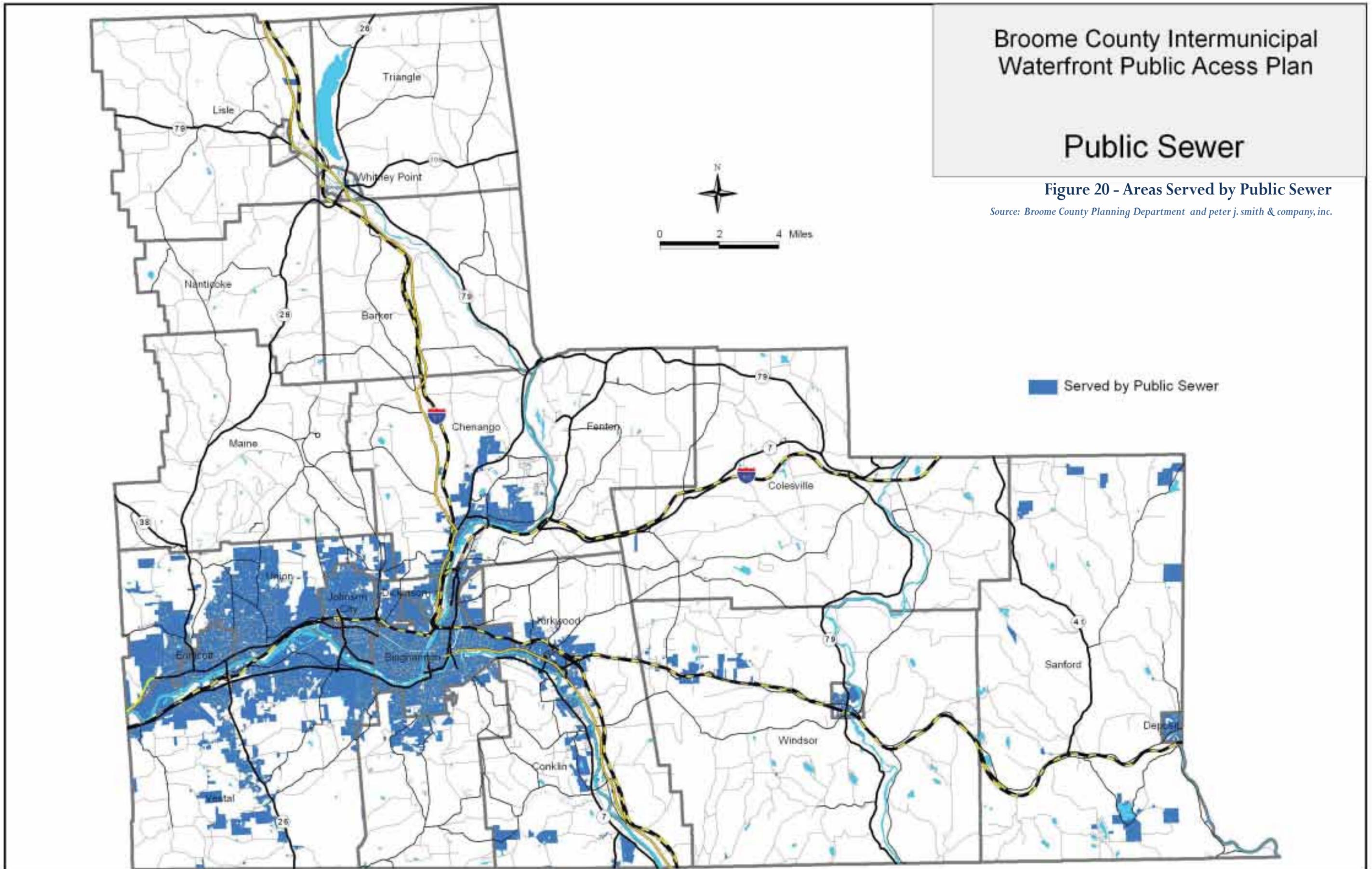


Broome County Intermunicipal Waterfront Public Access Plan

Public Sewer

Figure 20 - Areas Served by Public Sewer

Source: Broome County Planning Department and peter j. smith & company, inc.

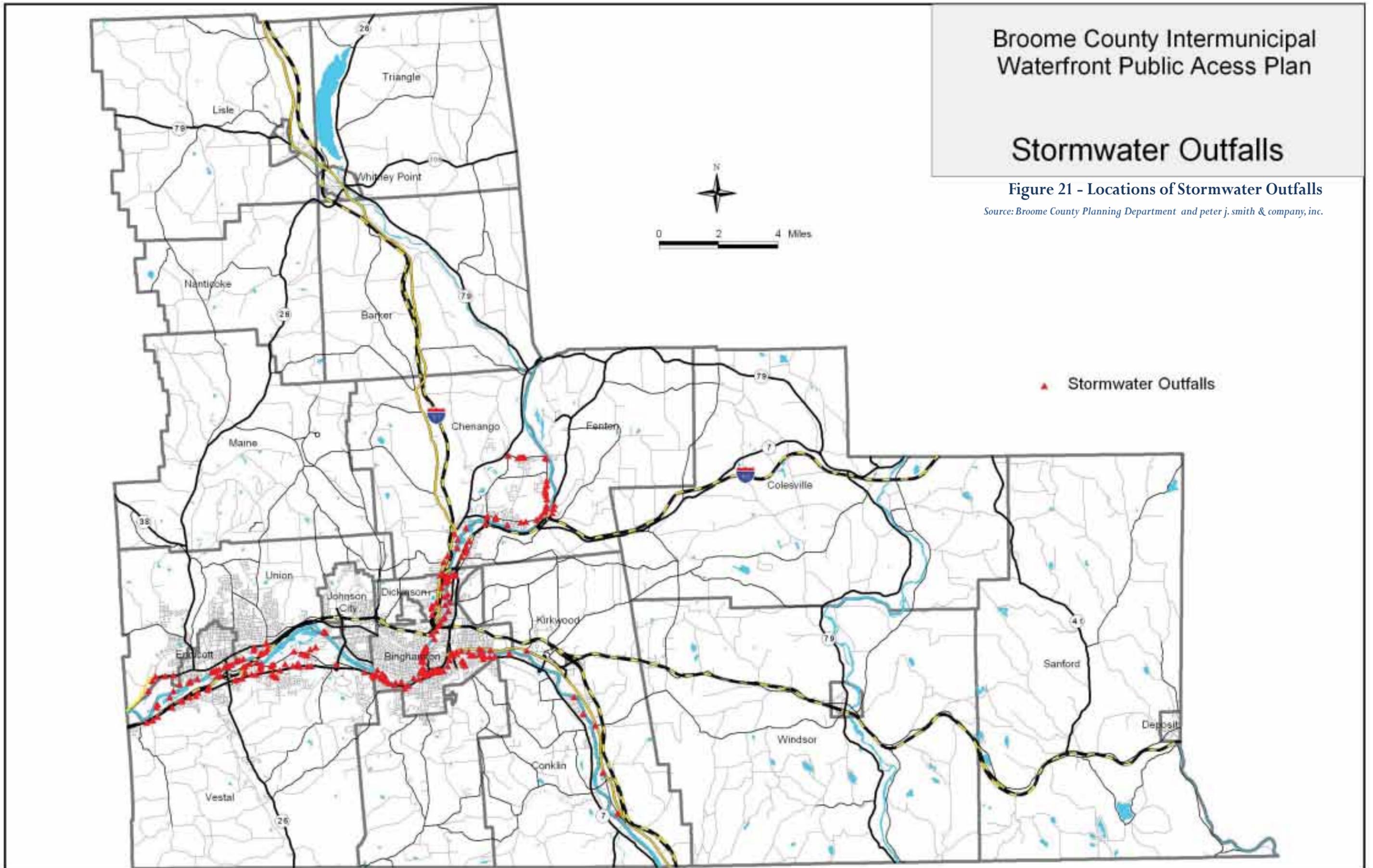


Broome County Intermunicipal Waterfront Public Access Plan

Stormwater Outfalls

Figure 21 - Locations of Stormwater Outfalls

Source: Broome County Planning Department and peter j. smith & company, inc.



Transportation Systems

Broome County's development has been geared towards accommodating vehicular traffic. Vehicular access to/within the county's population centers via main arterials is good. There is no county-wide pedestrian network. There is a network of bicycle routes, the majority of which are located on existing roadways. The following is a summary of the existing transportation systems in the county as they relate to the Broome County riverfront.

6.6.5 Vehicular Transportation System

Interstate 81, designated the American Legion Memorial Highway, crosses the study area boundary in two locations. The first section enters Broome County from the north in the vicinity of Whitney Point where it lies within the study area between the Tioughnioga River and Whitney Point Reservoir. The second section, just north of Dickinson to the interchange with NYS 17, lies on the western side of the Chenango River. Both sections serve as physical barriers providing limited areas of access to the water.

NYS 17 (eventually Interstate 86) runs alongside the east/west portion of the western section of the Susquehanna River. The route is a major physical barrier to waterfront access from Johnson City and west to the county line. NYS 17 crosses the eastern section of the Susquehanna River at Windsor and also crosses the Delaware River at Deposit, where it follows the river to the south along the study area's eastern boundary.

US Route 11 follows beside the Tioughnioga River from the northern county border to the Town of Barker. The route follows the Chenango River north of Dickinson to the Susquehanna River. From there the route follows the Susquehanna upstream until it crosses out of the county into Pennsylvania.

Vestal Parkway (NYS Route 434) forms the southern part of the boundary along the western section of the Susquehanna River, upstream to the confluence with the Chenango River. It is a heavily used roadway, carrying the majority of traffic between the city and all communities to the west including Binghamton University.

6.6.6 Air Service

The Tri-Cities Airport located in Endicott services single engine, multi-engine and glider airplanes. The airport is situated along a bend of the Susquehanna, on the north side, within the flood zone. There is a recreational ball field located adjacent to the airport. The athletic field is not located in the direct line of aircraft taking off and landing. There is potential for access to the waterfront from the access road to the airport and a loop trail is planned around the facility.

6.6.7 Rail Transportation System

Railroads prefer relatively flat terrain. Because rivers often flow along the flattest terrain in the area, railroad tracks often parallel rivers. A railway corridor runs adjacent to all but the Delaware River in the study area. Rail bridges cross over the rivers in several areas. There is no passenger rail service available in Broome County; freight transportation is the only service offered. Most of the rail lines in the area are actively used. Abandoned/service discontinued rail lines exist west of Binghamton on the south side of the Susquehanna and practically all of the eastern section of the Susquehanna. Much of these defunct rail lines currently have existing or planned trails along their corridors.

6.6.8 Bus System

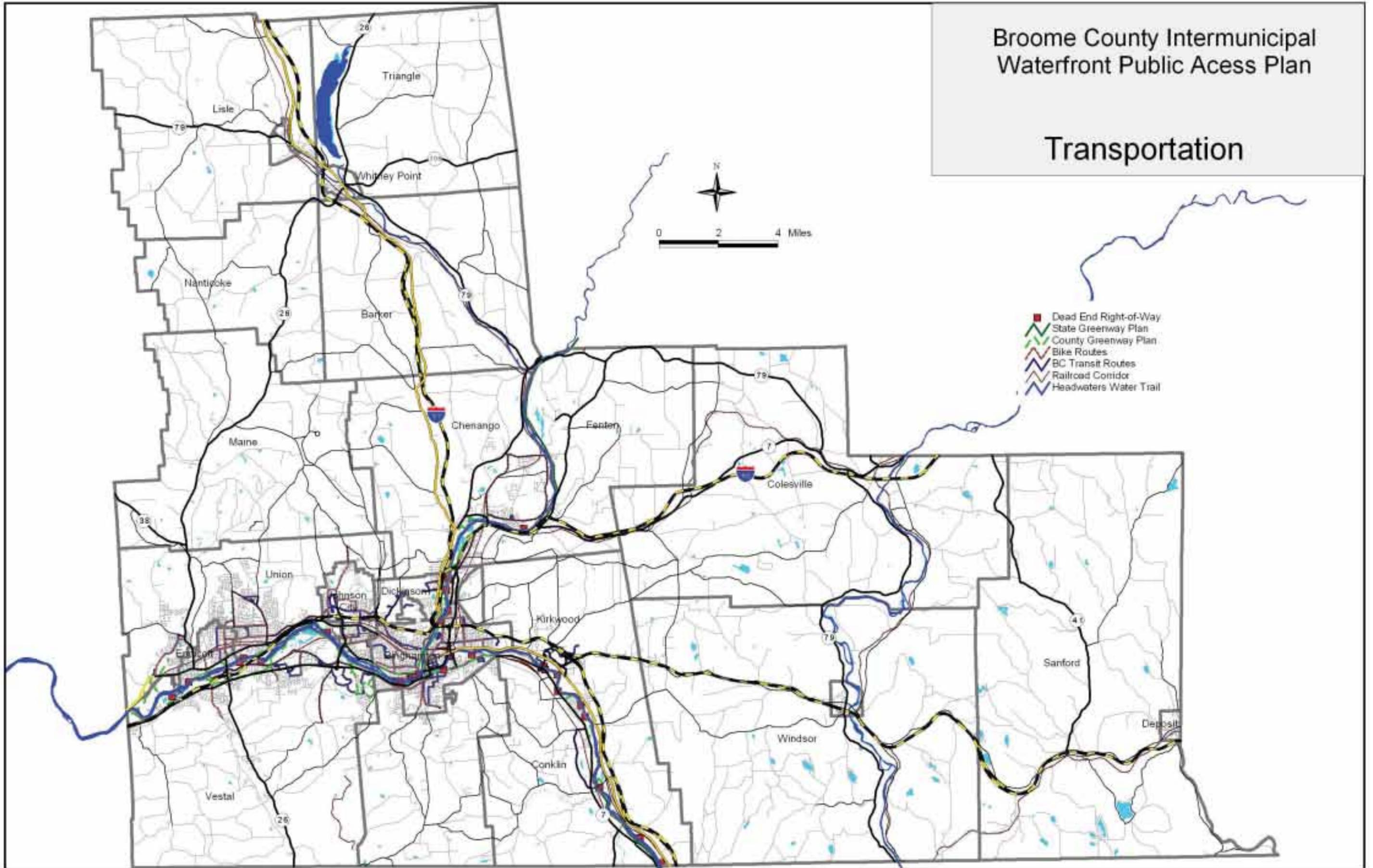
Broome County (B.C.) Transit operates an extensive county-wide public bus service. It has daily service for areas adjacent to the Susquehanna/Chenango Rivers and offers county-wide rural access on a limited basis.

Figure 22 - Transportation Systems (right)

Source: Broome County Planning Department and peter j. smith & company, inc.
peter j. smith & company, inc.

Broome County Intermunicipal Waterfront Public Access Plan

Transportation



6.6.12 Pedestrian/Bicycle System

Most urban areas within the study boundaries have extensive public sidewalk systems.

Not all bridges offer the best conditions for pedestrian traffic, or may nor offer any at all.

The larger transportation roads with limited access create a substantial barrier to waterfront access along many of the waterways.

There are several bike/pedestrian trails along the river corridors:

- ◆ Chenango Valley, Tow Path/River Road – 3.0 miles – (Fenton)
- ◆ Chugnut Trail – 0.75 miles – (Endicott)
- ◆ Otsiningo Trail – 3.4 miles – (Dickinson/Chenango)
- ◆ Port Dickinson Park Trail – 0.8 mile – (Port Dickinson)
- ◆ Riverwalk – 2.5 miles – (Binghamton)
- ◆ Vestal Rail Trail – 2.2 miles – (Vestal)
- ◆ Whitney Point Reservoir Trail – 2.2 miles – (Triangle)

6.6.13 Dead End Right-of-Ways

There are several areas throughout the county where a road rights-of-way end at the edge of a river. These areas provide opportunity for public access to the waterfront. The location of these access points are shown in Figure 22.

6.6.9 Canal System

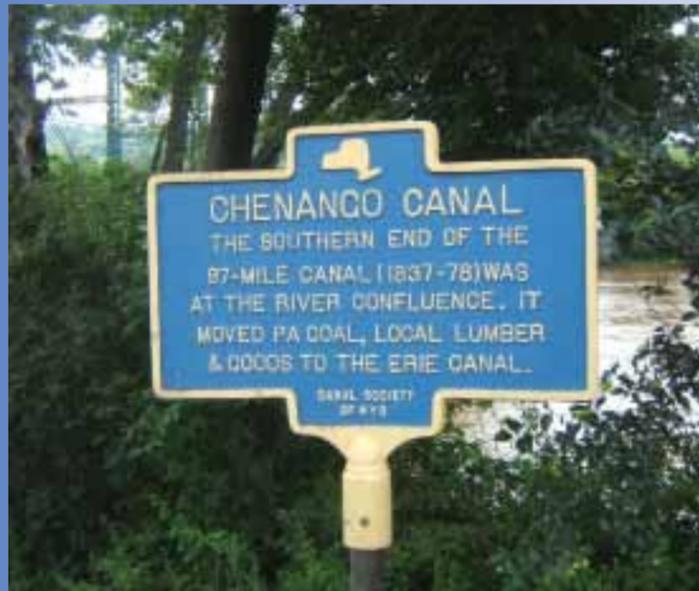
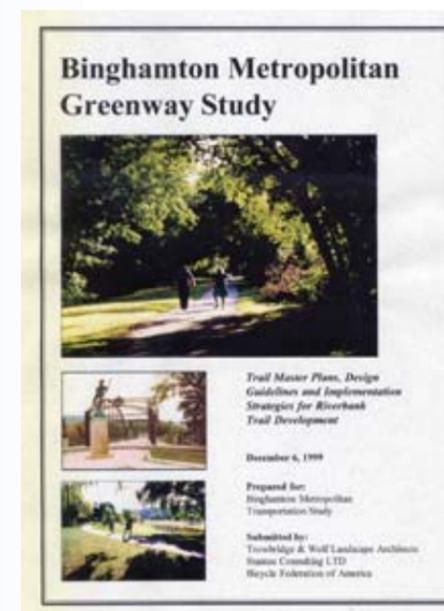
In the past, the Chenango Canal traversed the area from 1837 until it was closed around 1878. As is often the case, railroad tracks, roads and other transportation systems were built in its former location. Portions of State Street and Chenango Street in Binghamton, NY Route 5, NY Route 8 and NY Route 12 are built over the old canal path.

6.6.10 Blueway System

Presently there is a group working to designate a river trail along the waterways in the study area. The Headwaters River Trail Partnership is a working towards implementing the Headwaters River Trail. It is a canoe and kayak trail including the Susquehanna River and its four major tributaries: the Chenango, Unadilla, Otselic, and Tioghnioiga rivers. This blueway, with the Chemung Basin River Trail and Pennsylvania river trails completes the entire Susquehanna River system all the way to the Chesapeake Bay.

6.6.11 Greenway System

The Binghamton Metropolitan Transportation Study has developed a master plan for riverbank trail development. Entitled ‘The Binghamton Metropolitan Greenway Study’, it identifies thirteen trail master plans that are to be developed within the Waterfront Public Access Plan’s study boundary. The trail section, totaling in excess of 50 miles, would be linked by sidewalks and on-road bikeways. It is expected to take ten to twenty years to implement all the trails.



Chenango Canal Historic Marker, Binghamton



Bikeway System, Binghamton Area

Appendices

INTERMUNICIPAL PUBLIC ACCESS PLAN FOR THE COMMUNITIES OF THE CHENANGO, DELAWARE, SUSQUEHANA & TIOUGHNIOWA RIVERS

Appendix I: Narrative Description of the Proposed Study Area Boundary

Table I-1– Study Area in Acres

Study Area Section	Acres
Susquehanna-Chenango-Tioughnioga-Otselic	31,701
Upper Susquehanna	9,968
Delaware West Branch	1,202

In order to simplify the description of the boundary area, the following rules were used to determine the extent of the boundary:

- ◆ Where the description mentions “parcels fronting,” the boundary is the rear property line of the parcel or a line measured 500 feet from the center line of the road, whichever is shorter.
- ◆ The boundary is used for determining the study area. However, if there are resources located beyond 500 feet from the road center line on a parcel fronting the road, the resource may be included in the inventory.
- ◆ Similarly, if a unified development is made up of several parcels, some of which may not have frontage on the road, the entire development may be considered when determining intrinsic resources. Shopping plazas and Binghamton University would fall into this category.
- ◆ When a park is adjacent to the project area, the entire park was included in the project area for both the determination of resources and calculation of the project area. Instances where a park forms the outer boundary of the study are noted in the description of the study boundary.
- ◆ For further simplification, this narrative description of the study area is broken down into the three separate contiguous areas. The description is further broken down into county-line-to-county-line segments.

The entire study area includes more than 14,000 acres – 67 square miles in a wide-ranging and varied landscape. Of the three defined boundary areas included in the following description, the largest is the Susquehanna-Chenango-Tioughnioga-Otselic with 50 square miles of the study area. The study area sections are summarized in Table 19.

I.I Susquehanna-Chenango-Tioughnioga-Otselic Section

Tioga County to PA State Line – Southern Boundary

The boundary is created by parcels fronting on the south side of Vestal Parkway from the Tioga County Line heading east to the intersection of Parkwood Road. From Parkwood Road to the intersection of Arch Drive, the boundary is formed by the rear property lines of parcels on Parkwood Road and Arch Drive where the rear property line faces Vestal Parkway. From Arch Drive, the boundary resumes being formed by parcels fronting on the south side of Vestal Parkway until Clayton Avenue (even if some of the parcels have addresses on Front Street or intersecting streets). At Clayton Avenue the boundary includes Memorial Pool, then continues along parcels fronting on the south side of Vestal Parkway until just before African Road where African Road Park is included in the boundary, then continues along the parcels fronting along the south side of Vestal Parkway until just after Jensen Road where the boundary is formed by the rear lot line of parcels fronting Chalburn Road where such lot lines are parallel to Vestal Parkway. After Chalburn Road, the boundary again follows the parcels fronting the south side of Vestal Parkway, continuing eastward until Vestal Avenue. The boundary then follows the center line of Vestal Avenue until Washington Street. At Washington Street, the boundary is formed by the parcels fronting the east side of Washington Street until Vestal Parkway, then follows Vestal Parkway east until it turns northward and becomes State Street. Before the State Street Bridge, the boundary follows parcels fronting on the south side of Conklin Avenue heading eastward, and then on the west side of Conklin Avenue where Conklin Avenue bends southward to the Pennsylvania border. Alfred Street Park, in Binghamton, is included in this section of the boundary.

The Pennsylvania border connects the boundaries between this segment and the following segment.

INTERMUNICIPAL PUBLIC ACCESS PLAN FOR THE COMMUNITIES OF THE CHENANGO, DELAWARE, SUSQUEHANA & TIOUGHNIAGA RIVERS

PA State Line to Chenango County – Southeastern Boundary

The beginning of this section of the study area boundary is formed by parcels fronting the eastern and northern side of US Route 11/Kirkwood Avenue as the route heads in a northwest direction from the Pennsylvania state line to Crescent Drive. Here the boundary follows Crescent Drive northward to include Valley Park, then crosses over to the NY Route 17 ramp westward as it merges into Route 11/Upper Court Street until Colesville Road. At Colesville Road, the boundary resumes following parcels fronting on the north side of Upper Court Street, and then Court Street (Route 11) in a westward direction until it crosses under the Norfolk Southern railroad tracks. The boundary then follows the railroad tracks westward to Chenango Street and follows Chenango Street northeast to Eldridge Street. At Eldridge Street, the boundary follows parcels fronting on the eastern side of Chenango Street until the road ends at I-88. The boundary then follows I-88 in a northeast direction until the Albany Street exit. The boundary then follows parcels fronting on the eastern side of Route 369 in a northerly direction until Chenango Valley State Park Road. Chenango Valley State Park defines the study area until it meets up with parcels fronting on Pigeon Hill Road. (Chenango Valley State Park Road is the crossover between Route 369 and Pigeon Hill Road.) The boundary then follows parcels fronting the eastern side of Pigeon Hill Road heading north until Route 79, where it crosses over and intersects with the border of Chenango County.

The Chenango County border becomes the study area boundary connecting the previous segment to the following segment.

Chenango County to Cortland County – Northeastern Boundary

From the Chenango County border, the study area boundary is defined by parcels fronting the northern side of Route 79, as Route 79 heads in a southwest direction, where it joins up with Route 12. The boundary then follows parcels on the eastern side of Route 79 as Route 79 splits with Route 12 and heads in northeasterly direction until the Village of Whitney Point. At this point, the eastern border of the Village of Whitney Point defines the study area until Route 26 exits the village on the northern side. The boundary then follows parcels fronting on the eastern side of Route 26 heading north until it intersects with the border of Cortland County.

The Cortland County border becomes the study area boundary connecting the previous segment to the following segment.

Cortland County to Tioga County – Western and Northern Boundary

From the Cortland County border the study area boundary follows parcels fronting the western side of River Road heading in a southerly direction. River Road turns into Killawog Hill Road. The boundary follows parcels fronting on the western side of Killawog Hill Road until Whiting Hill Road. Still heading south, the boundary follows parcels fronting on Whiting Hill Road until the Village of Lisle. At this point, the western and southern borders of the Village of Lisle become the study area boundary until Whitney Point-Lisle Road exits the south end of the village. The boundary follows the parcels fronting on the western side of Whitney Point-Lisle Road until the Village of Whitney Point. The border of the Village of Whitney Point defines study area boundary until Route 11 exits the south side of the village. The boundary then follows parcels fronting on the west side of Route 11 in a southerly direction until Barker Road. The boundary then follows parcels on the south side of Barker Road, then the western side of King Street heading south until the road ends at Knapp Hill Road. The boundary then follows the parcels fronting on the south side of Knapp Hill Road until Route 12, where it follows the parcels on the west side of Route 12, heading south until Route 12 intersects with River Road in the Town of Chenango. The boundary then follows parcels fronting on the south side of River Road heading east, then parcels fronting on the western side heading south, then parcels fronting on the northern side heading west until River Road turns into Main Street. The boundary then follows parcels fronting on the north side of Main Street, then the north side of Chenango Bridge Road until the route returns to Route 12. The boundary then follows the parcels fronting on the west side of Route 12, heading south, which turns into Upper Front Street, then Front Street, until the road intersects with Old Front Street. The boundary then follows parcels fronting on the west side of Old Front Street until Rosedale Drive where it then follows the centerline of Old Front Street until it dead-ends at I-81, then directly south until the boundary is able to resume following parcels fronting on the west side of Front Street on the south side of the I-81/Route 17 Interchange. The boundary

continues to follow parcels on the west side of Front Street, until North Street, where the boundary heads south along Oak Street. At Main Street, the study area boundary bumps out away from the waterfront in order to include a section of the City of Binghamton's Heritage Area. This portion of the study area includes parcels that front on the north side of Main Street from Oak Street to Jarvis Street (not including the parcel with frontage on Jarvis Street) and parcels fronting on the south side of Main Street from Oak Street to Arthur Street and from Chestnut Street to Cedar Street. The following parcels, which do not have frontage on Main Street, are also included in the study area: 137-163 (odd) Chapin Street; 5-7 (odd) Edwards Street; 105-115 (odd) Murray Street; 112-116 (even) Murray Street; 111-115 (odd) Oak Street; 80 Walnut Street; and 89-91 (odd) Walnut Street. The boundary then continues south on Oak Street until it begins following parcels fronting on the north side of Riverside Drive heading west. The boundary then follows Route 201 North to Main Street, then follows parcels fronting on the south side of Main Street until Allen Street. At this point the study area boundary is defined by the Johnson City Heritage Area. This portion of the study area includes all parcels with frontage on both sides of Main Street from Allen Street to Brigham Street. The following parcels, which do not have frontage on Main Street, are also included in the study area: 11 Allen Street; 11 Arch Street; 24 Avenue A; 15-27 (odd) Avenue A; 12-28 (even) Avenue B; 11-19 (odd) Avenue B; 28-30 (even) Avenue C; 5-11 (odd) Avenue C; 7-11 (odd) Avenue D; 12-22 (even) North Broad Street; 7-19 (odd) North Broad Street; 90-98 (even) CFJ Boulevard; 0-10 (even) Gannett Drive; 1-3 (odd) Gannett Drive; 9 Harrison Street; 22 Harrison Street; 8 Isabelle Place; 17 Isabelle place; 8-40 (even) Laurel Street; 3-43 (odd) Laurel Street; 40-60 (even) Lester Avenue; 59 Lester Avenue; and 100 Pavilion Drive. The study area continues to follow parcels fronting on the north side of Main Street heading west until Main Street turns into George F Highway adjacent to the Norfolk Southern Railroad. The boundary then follows the Norfolk Southern Railroad until Hooper Road. From Hooper Road, the study area boundary follows parcels fronting on the north side of Main Street in the Village of Endicott until Garfield Avenue. At this point,

the study area boundary is defined by the Heritage Area for the Village of Endicott. The boundary heads north up Garfield Avenue, then east on the south side of North Street, then south on McKinley Avenue, then east on East McKinley Alley and continues east to include the northern portion of the 22 Adams Avenue parcel, then north on Adams Avenue, then west on the north side of North Street for 300 feet, then north through the parcel at 1803 North Street. The boundary then follows the Norfolk Southern Railroad until McKinley Avenue where it heads north along the east side of McKinley Avenue to Jenkins Street. Halfway up this stretch, the boundary bumps out to include the parcels of 212 and 214 McKinley Avenue. The study area boundary then follows the parcels fronting on the north side of Jenkins Street, also including the parcels on 304 Hill Avenue, 309 Hill Avenue, and 308 Odell Avenue. The boundary then follows the parcels fronting on the west side of Robble Avenue, heading south to Clark Street. From here, the boundary heads east on Clark Street, then north on Robble Avenue, then east on Watson Boulevard where it includes G.W. Johnson Park. The boundary then heads south along the west side of McKinley Avenue, then west along the Norfolk Southern Railroad for 225 feet where it heads south across the parcel at 1701 North Street, then west on the north side of North Street, then south on Madison Avenue, then east on Broad Street then south on Washington Avenue to Main Street, including the parcel at 200 Washington Ave. From here, the study area boundary resumes following parcels fronting on the north side of Main Street, while including the parcels at 1001 Park Street and 300 Lincoln Avenue, before exiting the Village of Endicott. The boundary continues to follow the parcels fronting on the north side of Main Street, heading west where it turns into Campville Road, before ending at the Tioga County border.

The Tioga County border becomes the study area boundary connecting the previous segment to the first segment and forming one continuous boundary around the waterfronts of the Susquehanna, Chenango, Tioughnioga, and Otselic Rivers in Broome County.

I.II Upper Susquehanna Section

PA State Line to Chenango County – Western Boundary

Beginning at the Pennsylvania state line, this section of the study area boundary follows parcels fronting on the west side of Route 79, heading north until the Village of Windsor where the village border defines the study area boundary until Route 79 exits the village on the north side. The boundary continues to follow parcels fronting on the western and northern sides of Route 79, heading north, then east, then north again, until Main Street in the Hamlet of Harpursville. The boundary then follows parcels fronting on the west side of Main Street headed north to Route 7. The boundary then follows parcels on the north side of Route 7 as Route 7 heads east, then slightly north, to the Chenango County border.

The Chenango County border becomes the study area boundary connecting the previous segment to the next segment.

Chenango County to PA State Line – Eastern Boundary

From the Chenango County border, the study area boundary follows parcels fronting on the east side of East Windsor Road south to the Village of Windsor. The Village of Windsor border defines the boundary until Old Route 17 exits the village on the south side. The study area boundary then follows parcels fronting on the east side of Old Route 17 heading south to State Line Road. The boundary then follows parcels fronting on the east side of State Line Road heading south to the Pennsylvania state line.

The Pennsylvania state line becomes the study area boundary connecting the previous segment to the first segment, forming one continuous boundary around the waterfront of the upper portion of the Susquehanna River in Broome County.

I.III Delaware West Branch Section

PA State Line to Delaware County- Western Boundary

Beginning at the Pennsylvania state line, the study area boundary follows parcels fronting on the south side of Faulkner Road heading west, turning into Sherman Creek Road to River Road. The boundary then follows parcels fronting on the west side of River Road, heading north to the Village of Deposit. The Deposit village boundary defines the study area boundary until it intersects with the Delaware County border.

Delaware County Line – Eastern Boundary

The Delaware County line, following the Delaware West Branch River, forms the eastern boundary of the study area from the Village of Deposit to the Pennsylvania state line.

The Pennsylvania State line becomes the study area boundary connecting the two segments and forming one continuous boundary around the waterfront of the Delaware West Branch River in Broome County.

I.IV Supplemental Study Area

All areas within 100 feet of a creek or stream within Broome County are also considered part of the study area. These areas are not included in any land use calculations contained in this report.

Appendix II: Public Input

II.I Advisory Committee Meetings

An Advisory Committee was established to guide the course of the planning process. This Committee was comprised of representatives from each of the 22 municipalities taking part in the project. The Committee met approximately 5 times to review and approve written and graphic material prepared for the document. Committee members were also regularly apprised of project updates and received draft materials via e-mail. All Advisory Committee members were also invited to contribute their own individual input as a part of the public input gathering process.

II.II Focus Groups

The Public Input process included a series of Focus Group sessions in three separate subject areas: Water-Based Activities, Trails, and Tourism/Economic Development. Focus Groups are comprised of local/regional “experts” in a particular subject area. Participants are led through a series of questions to which they respond on paper and then share their thoughts with the group. Groups typically comprise between 6 and 12 people to ensure a manageable discussion. Meeting notes from each of the three Focus Group sessions are attached on pages A-12 through A-23.

II.III Public Meetings

A series of Public Meetings were held in several locations upon various dates throughout Broome County to ensure that residents had a convenient opportunity to participate in the planning process. Residents were presented with draft planning materials and encouraged to suggest waterfront development projects that could be appropriate for their community. Participants were welcomed to draw on maps and/or submit written input. Participants were also asked to complete a “SWOT” Analysis by naming the Strengths, Weaknesses, Opportunities and Threats presented by the Broome County study area. The SWOT Analysis is a requirement for the Department of State’s review. The results of the SWOT Analysis, and all additional public input collected, is outlined on the following pages.

Public Meeting Tuesday 15th

Broome Community College, Town of Dickinson

Comment Sheets

- We discussed improvements to the riverfront at Otsiningo Park – it requires brush and tree removal

Meeting Notes (only 2 public people at the meeting)

Potential Projects listed at meeting:

1. Private land near border with Pennsylvania on east side of Susquehanna (west section) – potential to do the following
 - Apply for grants to develop area
 - Provide public river access – boat launch
 - Develop tourism trade – campground and facilities
2. Otsiningo Park – potential to do the following
 - Create views to Chenango River from park by removing some vegetation along sections of the bank
 - Consider a boat launch there
 - Cleanup brush areas along trail
 - The river is hidden from view
3. Route 17 – Binghamton to Vestal – clear out sections of river bank vegetation to open up views to water

Public Meeting Wednesday 16th
Endicott Visitors Center, Village of Endicott

Comment Sheets

- Great presentation and forum to “get things going”, very informative

Map Notes

- Create ‘The Big Loop’ trail: Chugnut Riverwalk, cross Vestal Ave. Bridge, Vestal Rail Trail, cross Susquehanna on old Lackawanna Bridge by Goudy Station, come back by Billy Hill Park, along north side of river, back to Chugnut
- Also, extend Chugnut to: Roundtop Park, Grippen Park, Mersereau Park, Glendale Park, Airport Park, and Riverview Park
- 2 - Pick-up history of Roundtop; sign along Riverwalk telling of history of area
- Roundtop Park could remove more trees to expose the big view!
- New pedestrian bridge across Chenango River between Otsiningo & Dickinson Town Parks
- New Chenango River crossing on Rte 369 in area where Rte 88 diverges from river (inventory map # 32)
- Provide canoe/kayak access at Wm. W. Hill Park in Westover (Town of Union), erosion control done w/ plantings or no-mow strip (wildlife and bird viewing for all citizens); now informal walking/bike trail; woods farther towards Endicott dug up – habitat destruction (no longer has wildflowers, just dirt)
- Rte 17 stretch before the Appalachian exist shows the river, but is there a place where people might view this without speeding by at 70 mph? (inventory map #s 3-5)
- Stretch of Rte 434 along river could use brush cleaning, etc. and a bike path (inventory map #s 16 & 17)
- Consider walkway along old canal bed on south side of river from Gates Road heading east
- Promotion of wildlife areas for fishing on Susquehanna River in Town of Windsor near PA line (inventory map #46)

- There is a boat launch (SE of Rte 201 bridge - inventory map #14), but the public needs to see more of it!
- Consider pedestrian bridge to islands for picnic area, bonfires, camping, and fishing
- Consider pull-off areas to see the great views along stretches of Conklin Ave. (inventory map #s 27 & 31)
- Link UENC and Boys & Girls Club to 3 parks
- Future Project – zoo or aquarium along trail
- Provide ice skating trail along walking trail
- Develop horse trails
- Separate trail for mountain bikes and dirt motorcycles; have areas next to river where 4-wheelers/ATVs/motorcycles can ride from Endicott to Endwell (already unofficially in use at Endwell)
- Provide solar lights for at night along walking trail
- Provide benches to sit by river
- Have some type of human powered transportation system along Riverwalk (rail or otherwise), possibly cover from weather eventually
- Have free community gardens along trail, excellent soil
- Dam river to raise level for recreational boating/fishing or dredge river bottom in middle to make deeper
- Look at deleting Goudy Dam – Will this ruin fishing? Will this help kayakers?
- Put-up bird houses
- Pave top of flood wall
- Does the public know they can use the river?



Advisory Committee Meeting



Public Meeting



Focus Group Meeting

Strength

- Connect the 6 communities (Vestal, Endicott, Westover, Johnson City, Endwell, Union)
- Lot of infrastructure already in place (built) – Chugnut Riverwalk, Vestal Rail Trail, Vestal Ave. Bridge w/ sidewalk, old Lackawanna Bridge over Susquehanna River
- Connects numerous existing parks together (Grippen, Mersereau, Roundtop, Riverview, Billy Hill, Harold Moore in Vestal)
- 3 - Showcase local history (Native Americans, Clinton-Sullivan Campaign, Endicott-Johnson, & IBM, En-Joie Park, Lackawanna Railroad history); Educate residents and tourists to history of area with plaques
- Majority (almost all) property already publicly owned
- Existing river access points
- Would access 2 existing (Grippen & Harold Moore Parks) and 2 proposed (Riverview Park & Town of Union ramp – Billy Hill) boat ramps
- Loop has a large number of access points that would include close access to a large number of people
- Largest metropolitan area along Routes 86, 81 & 88
- Existing plans & completed projects
- 2 - Multi-disciplinary partnerships; Existing partnerships
- Binghamton University
- 2 - Local concerns on health issues; Exercise for adults/kids/youth, reduce obesity and health care costs
- Aging population
- Local support – canoe, bike & hiking
- Local sports groups can use facilities for exercise
- Promote charity races/runs along river
- Increase use of Roundtop Park
- Community Garden along river trail – help families with food
- Get bikes off streets – less accidents with cars
- Keep kids off streets and out of trouble
- Help people to relax being near water
- Walkers (from my experience) will clean walkway of trash voluntarily
- 2 - Wonderful natural features; Natural areas
- Good fishing area
- “Bird”ing opportunity
- Beautiful, a lot of waterway

Weakness

- Maintenance costs / responsibilities
- Liability issues
- Poor economy
- Binghamton University’s lack of community involvement
- Aging population
- Flood plain
- Flood control features
- Rivers are shallow
- Not enough roads on the waterfront
- Buildings don’t face the river
- No pull-off areas to view the river
- Few prominent natural features
- Heavy traffic patterns around river features
- Car-centric mentality
- Sprawl
- Bad element

Opportunity

- Ecotourism; Major loop would attract outside tourists; Increased revenue/ taxes from tourism
- History; Canalways
- Positive connection w/ our neighbors
- Hard times spur public investment
- Flood property buy-outs provide opportunities
- Natural gas exploration
- Identify (new) park locations
- River overlooks
- Fishing
- Low draft boating
- Downtown student housing
- High gas prices

Threat

- Availability of funding (state & national)
- 2 - Flooding - (although typical) only covers blacktop w/ silt, would need to be cleaned off after flooding in low areas
- Vandalism – DEC signs defaced or removed, rules for motorized vehicles on flood walls, etc. are not respected, do we have enough people to supervise and oversee the areas?
- Natural gas exploration
- Invasive species
- Apathy

Comment Sheets

- 4 - Boat ramp/launch in Windsor w/ boat storage for safe keeping while one is visiting the town (existing ramps in Centerville & Nineveh)
- Public access to the river south of Ouaquaga to the PA border is non-existent, you can get in but you can’t get out
- River is under-utilized in the Windsor area
- 2 - Walks, paths, promenades – also for cross country skiing (rail-trail) – have on it many things to do (work –out equipment, jungle gyms, Indian village)
- 2 - Bike trails – recreation, transportation
- 2 - Public art & signs for guidance and sense of place, art pieces from local artists that will stand up to weather
- Historical markers, history
- Scenic overlooks – birding (eagles)
- Parks – recreation oriented, nature oriented
- Gathering spaces – picnic & barbeque areas
- Community market
- Cofferdams to increase water depth?
- Dredge river

Map Notes

- 6 - Boat launch at Windsor; Public access needed primarily in town/village; Windsor needs at least one point of public access (with park / picnic area) to river in or near village; Create boat launch (just south of the village of Windsor) with fishing pier, ample parking, mini golf, park benches; create sidewalk from launch on west side (river side) of street to blinking light (inventory map # 48); create river access/boat launch with picnic area and nature area with walkway to connect to rails to trails; Boat launch with a public park/picnic area
- 4 - Need river hiking & biking trail; Walkway by river; Bike trails; Use old railroad system for walking trails; Benches, natural walkways

- 3 – Klump Park needs help; Fix-up Klump Park in Windsor – move monument up to street and make a horseshoe parking lot behind memorial near community center; Klump Park and pool project
- 2 - Develop Marion's Park Boat Launch – riverboat gambling; Riverboat gambling along Windsor stretch
- 2 - Develop rail station in Windsor as connection with access similar to Coal House in Vestal
- Ouaquaga boat launch – enhance with picnic area and grills; historic markers about Native American village there and one about historic bridge; solar lights on old bridge
- Beautiful, relatively untouched valley – want to see river better utilized for recreational boating – need boat launch
- Locate boat launch/fishing pier/NYS visible marker to denote NY/PA line for boaters where Susquehanna River leaves the Town of Windsor
- Capitalize on scenic route designation of Rte 79 from Windsor to Ithaca – get a network of B&B's, farms, Restaurants, antique stores, etc. to get people off the highways and onto the scenic byways
- Create a byway for river use between Whitney Point and Chenango Forks with ample boat launches (similar to what is asked to do along the eastern section of the Susquehanna River)
- Market the 'river byway' routes (blueways)
- Develop awareness of attractions along river, such as old Ouaquaga Battlefield and Ouaquaga Bridge Sites to encourage tourism
- Expand on Windsor on the Arts to include Indian History, fauna and foliage
- Provide boat launch rack at Bridge Street so boaters, canoers, kayakers can go into village for lunch, ice cream, farmers' market
- Build old fashioned water wheel and lookout over river (southwest of Windsor) and generate electricity to run light in Windsor and bridge
- Want large park development north of Windsor on east side of river
- Link up highway exits west of Windsor with Muriors site park and bridge walkway
- Make connection to rail-trail of NE PA (inventory map # 46)
- Boat landing in Great Bend; Boat landing 3 miles north of Susquehanna
- Coordinate rail-trail and waterfront
- Connect rails to trails to village and park
- Boating river front stores and Main Street stores
- Need parking
- Need parks/picnic areas
- Need to highlight historic sites
- Need campsites (campgrounds)
- No place to stop and get out of boat
- Need restrooms and access to water periodically along rail-trail
- Boat/canoe trips
- Canoe & kayak rental/tours
- Create ice skating pond near Windsor
- Develop history – historical markers for area
- Three-river triathlon with Broome County, get patch when completed or set up different places along the river to sign –in and make it a summer long or lifelong event similar to the Adirondack 46 mountain peaks
- Think up some wintertime things you can do on the river – maybe Winter Festival; snowmobile races; toboggan runs
- Try canoe race; canoe races from and to parks in Harpursville and Windsor (or boat launch); associate with Pine Crest camping – overnight lodging
- There is real good fishing in river in valley
- Bald eagles are in the Windsor Ouaquaga area
- Clear dams/river for boat channel

Strength

- 6 - Rich history; Important Iroquois settlement here, figured in Revolutionary War, busy Whip factories in Windsor (one beautifully restored and now an art museum); Indian history, St. Luke's Museum; Historical sites: Indian Heritage
- 4 - Rural nature, wildlife, fishing, hunting, natural setting
- 3 - Gentle river; Low (river) flow; River
- 2 - Village (Windsor) and river easily accessible off Rte 17; close to major highway
- 2 - Unspoiled riverscape; clean, undeveloped river valley and flood plain
- 2 - Scenic beauty, Aesthetics of area
- 2 – Arts; Art gallery
- Existing facilities (Rte 17, Pine Crest Camping, boat launches)
- Bike trail already goes through Village of Windsor
- Local groups working to plan commercial development & historic preservation (cultural and art center)
- People/Windsor Partnership
- Town/village have intermunicipal interest to refurbish rail station
- Rail-Trail property owner wants to develop it as a trail
- Committed people
- Attractive village with New England-style village green
- Main Street businesses face the river
- Employment
- Agriculture
- Recreation – fishing, canoeing, rails for trails (hiking, x-country skiing, biking), hunting
- Close to nature
- Beautiful towns
- Many waterways
- Length of waterway
- Location in NYS
- Trail is missing link twixt trail in PA and Colesville
- No river access from Village of Windsor to PA line
- No river access from Binghamton to PA line
- Flood zone – land can't be developed

Weakness

- 5 – Money: Economics – money – land acquisition (i.e. for boat launch at Bridge Street in Windsor)
- 3 - Lack of access; Limited public access
- 2 - Private property stops access, private land
- 2 - Low (river) flow; River depth - shallow
- Lack of facilities – no restrooms
- No parking
- No public camping at this time
- No police department (in Windsor) – patrolled by NYS Troopers
- Lack of connected infrastructure on the river
- Village distant from water (no waterfront)
- Maintenance (labor)
- Flood considerations

Opportunity

- 4 – Tourism; Attract tourism; Heritage tourism – Windsor is the oldest area in the county
- 3 - Economic – by bringing people into area; Stimulate local economy (economic development)
- 2 - Small business – fishing, boating, camping, hiking, cross country skiing, convenience stores for food, restaurants, etc.; additional business
- Build on strengths – educate and advertise
- Revitalize and educate (history)
- Enhance and preserve historic elements
- Employment
- Chance to bring sense of community county-wide
- Attract seasonal residents
- Attract new residents
- Preserve rural lifestyle
- Destination point
- More recreation
- Drilling
- Potential money generated from gas exploration – no grant money needed
- Railroad Museum
- Improve Klump Park
- Increase events

Threat

- 4 - Poor water quality of Susquehanna; Pollution; Threat of degradation to environment by increased activity; Nature must be protected
- 4 – Flooding; (although suggested improvements are resilient)
- 2 - Gas drilling
- Funding
- Poor economy
- DEC
- Train station rapidly deteriorating
- Property ownership
- Fear of change
- Misuse
- Doing nothing

Figure AII.1 - Public Meeting Graphic Synthesis Map (right)

**PUBLIC MEETING
GRAPHIC
SYNTHESIS
MAP**

LEGEND

PROPOSED

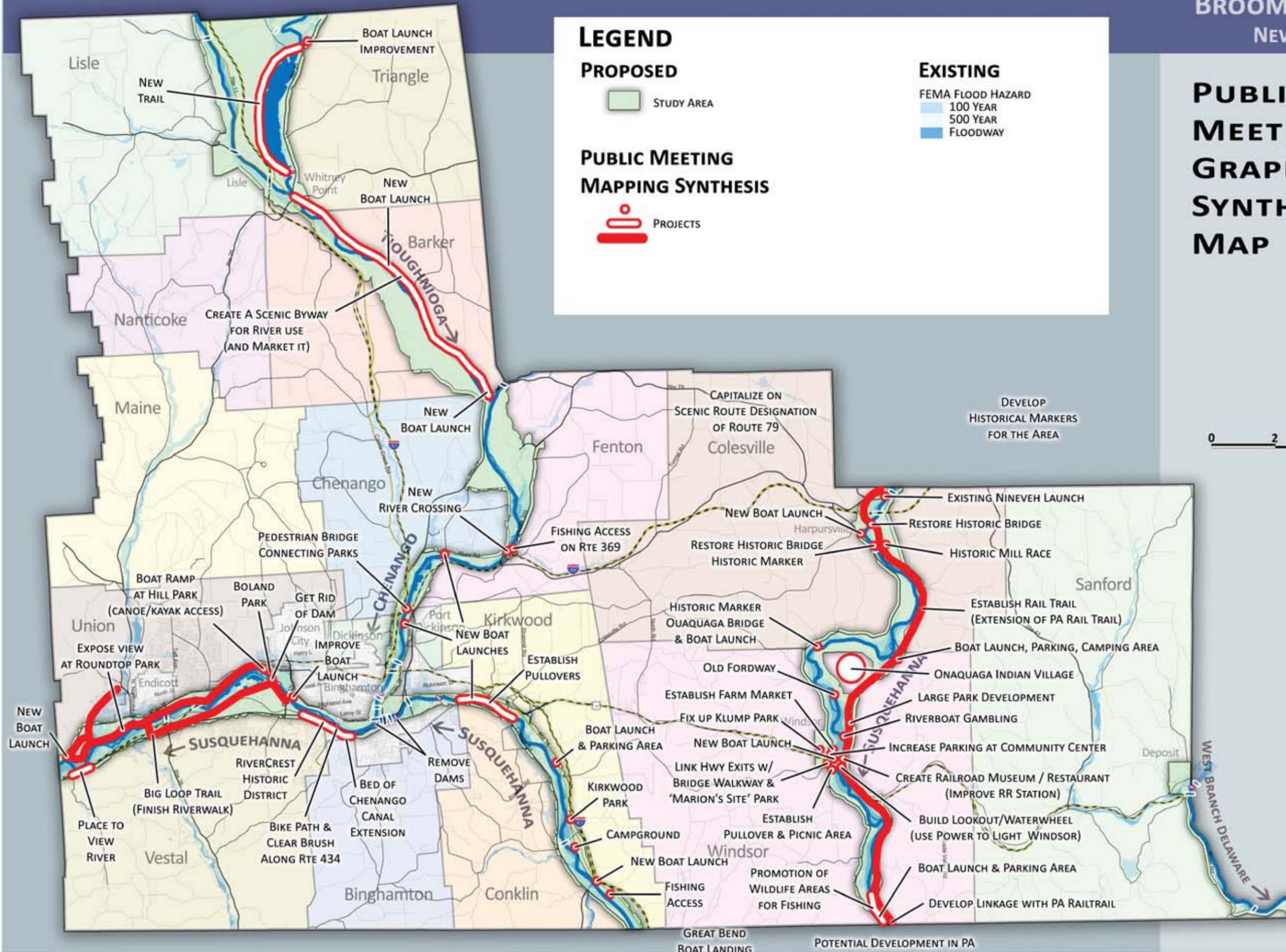
STUDY AREA

EXISTING

FEMA FLOOD HAZARD
100 YEAR
500 YEAR
FLOODWAY

**PUBLIC MEETING
MAPPING SYNTHESIS**

PROJECTS



INTERMUNICIPAL WATERFRONT PUBLIC ACCESS PLAN FOR THE COMMUNITIES OF THE CHENANGO, DELAWARE, SUSQUEHANNA & TIOUGHNIOGA RIVERS

THIS MAP WAS PREPARED FOR THE NYS DOS WITH FUNDS PROVIDED UNDER TITLE 11 OF THE ENVIRONMENTAL PROTECTION FUND

DESIGN planning
peter j. smith & company, inc.
www.peterjsmith.com
United States, Canada, New York - Canada Post Inc. Ontario

WATER-BASED ACTIVITIES FOCUS GROUP

Broome County Intermunicipal Waterfront Revitalization Plan

Wednesday, 11:00 am, Town of Vestal Board Room, February 16, 2011

Attendees:

David Marnicki, Vestal Town Council, Ahwaga Canoe & Kayak Club

Ross Geoghegan, Riverfest

Suzanne Geoghegan, Riverfest

Gail Domin, Broome County Department of Planning & Eco. Dev.

Judy Snedaker, Village of Johnson City

Jim Leonard, Rotary Club, Endicott

Ted Warner, Endicott Resident

Steve Herz, Town of Windsor, Broome County Legislator for Eastern Broome representation

Jim Bukowski, Parks Department, Town of Vestal

Ruth Lewis, Town of Vestal

Elaine Perkus, Citizen

Eyana Rose (daughter), Citizen

Jocelyn Gordon, peter j. smith & company

Andrew Schrauth, peter j. smith & company

Brief Summary of Study by Jocelyn Gordon – roadmap for DOT to follow waterfront improvement projects to fund in future, need to determine projects

1) What makes the Broome County waterways unique? How does the character of the riverfronts change from community to community?

They are not unique, but they are beautiful (regarding Vestal) – underused, underappreciated and underdeveloped. We are emerging from an age where the river was considered an undesirable sewer, and riverbanks were places to put industry - sand quarrying company (this area is inaccessible from road), other older industries have polluted grounds near river. This age is over, but the legacy is still with us. A prestige thing to do was to live up the hill and look down on waterfront industry. Don't forget the islands that are above water most of year; most privately owned, but these are opportunities.

The waterfront between Binghamton and through Vestal includes the entire range of public, private, recreational and industrial use. This is not unique, but does offer a variety of uses and views.

Suzanne – having done 3 river cleanups, see history of river thru these eyes, underused resource, such a variety of uses of river bank would make it interesting, walk by gravel pits with birds that live there, variety is visually interesting

Islands unique, but floods every year

Susquehanna – “river of Big Island” to Native Americans

Steve – river in Windsor area, yearly flooding is issue, no permanent structures due to this,

Ted – one thing unique is historic route – Clinton-Sullivan Campaign; Endicott has 2 waterfront access regarding boating; someone built wide trail from bridge to Roundtop – not sure who did it but ready for asphalt, Grippen Park not in boundary – (need to go over this with Gail), problem getting around Roundtop to Grippen Park, long stretches that are undeveloped, probably about 500 yards behind golf course that could be used to increase Grippen Park, river around airport – looked at 9 hole kids golf course – so ability for trails

Jim – focus on Endicott, Native American history, Chugnut River Walk, Chugnut means land of tamaracks, En-Joie Park was center of community, flooding happens, as it comes thru, the silt settles on walkways, very slippery, rain washes away, very easy connect to Vestal Rail Trail

Judy - Johnson City does have boat launch, need to bring back history, in Tioga County - Hiawatha Island – her husband lived on it, used to be flat boats, how ties into future, remember history of the waterfront

Elaine – Chenango/Susquehanna Rivers are special, so much beauty in area, consider little museums to interpret history for kids and tourists, consider farmers market associated with waterfront, Broome County permanent structure for farmers market – Steve and Gail worked on it – Spitzer rec'd Otsiningo Park for it, high visibility and accessibility, Cornell Cooperative Extension there, very good study done by Spitzer, now need \$600,000, on County Planning Department link

I have canoed many lengths of the river, they are not unique. River has same basic characteristics; changes – rural to city/village to rural. Rural riverbanks have very little development with farming directly adjacent to the rivers. Urban areas have turned their backs to the rivers. All rivers are mainly class 1, few areas class 2, with very little development along shores, primarily cottages along shore. The urban areas have turned backs on rivers primarily due to dykes/flood walls, due to flooding.

Anna Rose – want boat rides to islands that have parks/diners/restaurants

The history of the waterways needs to be brought back so people understand their importance to the development of the region. Each community played a part in the development of the whole and taking a modern approach, keeping history in mind, would remind people of where we came from. There is the Chenango Canal relevance – underused resource for recreation – walking, boating, swimming – Boland Park.

There are long stretches of riverfront very close to local business districts, especially in Endicott and Binghamton, which have no riverfront trails and are underdeveloped. Endicott has 60% of its riverfront with flood wall or levee. It has only two possible river access points, especially for boats (Boys Club and Grippen Park).

It is unique due to its historical background; Native Americans; Clinton – Sullivan Campaign; industrial heritage (especially Endicott / Johnson City and IBM; community focus (e.g. Ideal Park, which became En-Joie Park)

Regarding the Susquehanna in eastern Broome County, the river aids in irrigation, recreation, fishing, etc. The beauty of the river is paramount in our area. The Iroquois used the river for transportation. They were very active in eastern Broome County.

2a) What are the top three opportunities for recreation and water-based activities in Broome County?

Gail – All Schools are not included in the study boundary, ones within ½ mile should be included for connections to river trails

Steve – canoeing, boating, fishing are obvious, agri-tourism opportunities are huge, urge bringing in someone from Cornell Coop Ext to focus group – Laura Buscillo would be a good one – Steve sits on board and will get them involved, agriculture in county has changed, was 30 cow, most are gone or very large, now agriculture is diverse in county, very appropriate to meld with river plan, Windsor and Colesville are looking to do effort on focusing tourism on the river

Judy – mazes, related to agriculture that relate to tourism

Part of Heritage Area plans to have agri-tourism trail, also have a lot of strange animals

Ross – water activities are obvious, birding offers potential, tremendous variety along rivers, groups with expert guide has potential, existing Naturalist Club may be able to do this, bald eagles seen – may be nesting, canoeing – problem – dykes/floodwalls there for flooding – canoeing thru downtown Binghamton is eerie – flood walls prison-like – no connection between sides of walls – both sides have potential, recommended canoe trip from east of Binghamton thru to Vestal

Suzanne – Park Diner liked for spectacular view of river (more than food), need to take advantage of great scenic views by retail developments

Elaine – need mom & pop style business critical, very meaningful and critical to future of community, keep \$ in community, support each other, yoga classes outside along river,

Judy – in Texas, Austin Riverwalk, consider this for Binghamton, need to figure out how to get people to the river

Need to put together a core of villages, all economically deprived, need to get arts and tourism to villages, individually not enough to get to each village but as a group much stronger, get art community and economic dev to villages

Consider reasonable B&B's, but need enough reason for tourists to come, right now not there, many tourist come up I-81 when visiting NYC Boston and DC, where can you rent a canoe in area?

General appearance is a big opportunity; could improve on general appearance of rivers; mow to make look as though taken care of. Large areas on both sides of Susquehanna between Endicott and Johnson City in undeveloped flood zones have flat areas that could be parks for merely the cost of brush hogging and then mowing. This is especially true along Route 17 (visible to traveler on Rt. 17).

Jim – in Vancouver have cute little boats to tour people around, consider this for rivers even though shallow water, rides on river are potential, Endicott walk has flat views of river and earthen dykes where see both sides, consider parking areas with grass growing structures, don't forget Chenango Canal and its history, all the locks, and the canal extension

On county GIS site, original canal and associated structures mapped, the entire length, on GIS mapping

Consider running a canal boat along section still existing, tourism, now DOT is throwing brush into it, public access is a problem there, canal extension is all dry

1. Need more boat launch access areas - every time a bridge crosses a river it should have access; so few now.
2. Also fishing access areas are needed, but often too steep a bank for canoes
3. Consider white water park at Rock Bottom Dam
4. Walking trails are needed along the banks of the river – issue is private property, consider loop from 201 bridge to Owego and back up other side (about 30 miles), injury law suits are an issue, most dykes are on private land that is leased

1. Boating, swimming, fishing (Johnson City has boat launch that makes access easy, but could be further developed)
2. Bike path / walking trail on riverbank could be developed

1. More access spots to river (boat ramps)

1. Extending trails in Endicott and connect to multiple county, town, village parks
2. Boating / fishing
3. Chenango River (old Chenango Canal) and part of canal extension in Vestal

1. Canoeing/boating/fishing
2. Agri-tourism
3. Eastern Broome County could focus tourism with the rivers

1. More restaurants with riverfront views
2. More parks and paths along the riverfront
3. More facilities for canoeing, boating, fishing

1. Nature: birding, etc. (with or without expert guides)
2. Water activities: canoe, kayak, fishing
3. Walking along the riverbanks where feasible

2b) What are the top three challenges?

Funding is the biggest challenge

Money

Shallow river is an issue. Is dredging possible? (Unlikely due to environmental issues)

Dams obstructing travel on the river is a challenge. Most dams have portage routes, but they could be improved, dam at Goudy Station has otter slide where can put kayak in and slide down.

Signage is an issue – Erin Heard (from first focus group) is working on this.

Safety is an issue, young kids in river not knowing what the dangers are on the rivers.

Elaine – water withdrawals for hydrofracking – (Dave stated – should not be an issue)

Flood walls make access difficult in spots.

So much riverfront is on private property. How do you preserve privacy and safety for local owners?
How do you preserve access to river for wildlife (i.e. deer)? How do you preserve the natural feel when you asphalt a path?

1. Pipes/waterfalls that cross river
2. Shallow areas of river (air boats could be used easily)
3. Flood walls / levees

1. Access
2. Marketing
3. Funding

3) How can the riverfront be physically improved to enhance recreation and water-based activities in Broome County?

The river needs to be dredged and cleaned.

Incorporate walkways/trails around four dams / pipes.

By marketing; develop tourism; clean it up! Create access points.

4) How can the Broome County Intermunicipal Waterfront Revitalization Plan best help your organization?

Come up with a practical plan that is attainable

Keep us involved with what's happening.

Make it practicable.

Misc. Comments/Questions:

What is status of funding for project? Environmental Protection Fund is used, EPF fund have increased every year, under Dept of State, dedicated funds thru real estate taxes. Funding may be obtained after the NY State budget passes and when the study is finished (at least a draft together); then go on DOS coastal website for details.

Notice to Attendees and Report recipients: The above is our understanding of the content of the meeting. Please report any inaccuracies or additional information needed to Andy Schrauth at aschrauth@pjscompany.com.

TOURISM, HERITAGE TOURISM & ECONOMIC DEVELOPMENT FOCUS GROUP

Broome County Intermunicipal Waterfront Revitalization Plan

Thursday, 9:00 am, Town of Vestal Board Room, February 17, 2011

Attendees:

Kathy Utter, Endicott Visitors Center

Lora Zier, Broome County Department of Planning and Economic Development

Beth Egitto, Broome County Planning / Envir. Mgmt. Council

Susan Sherwood, Center for Technology & Innovation

Joe Moody, Town of Union

Alex Urda, Village/Town of Windsor

Erica Urda, Village/Town of Windsor

Gail Domin, Broome County Department of Planning & Eco. Dev.

Curt Pueschel, Vestal, Conservation Advisory Commission

Jocelyn Gordon, peter j. smith & company

Andrew Schrauth, peter j. smith & company

Brief Summary of Study by Jocelyn Gordon

1) What makes the Broome County waterways unique? How does the character of the riverfronts change from community to community?

Rivers are connection/continuity between the communities, not fully utilized, unrealized potential for social spaces/gathering, rivers were livelihood of community, Deposit – logs ‘deposited’ in village, timber transport, rivers used to freeze, center of food industry and cold storage collaboration, ice was major industry, ice cream factory due to this along Chenango river, cold storage companies, magic city ice, rivers were gathering area for commerce and transportation. Alas, lack of access to river front along most river banks in Broome County, unrealized potential of social/public spaces along the rivers, will new FEMA rules make it worse? Bridges are an asset.

The rivers are tied to the history & development of towns. There are opportunities for interpretation, signage, and public art at locations along rivers. There should be connections from these to draw people into villages and historic villages and vice versa

Key events – historic events took place near our rivers. Spiedie Fest takes place annually at Ostiningo Park. Need to highlight water too, need opportunities on the river for this, used to have You Gotta Regatta at confluence, also had Pops on the River (floating music, but orchestra is expensive) banks used to bank it, music equipment not good to have out on water and bugs, but it drew people from far away, location of Pops could be done along riverside, near confluence is a natural slope that could be an amphitheater, but parts of it on the river – all people could see it, now this stretch of river is under-

utilized – great potential/opportunity. Blues on the Bridge was an asset on Washington Street Bridge – used to sway when people danced – so moved out – then not worked as well. Need strictly river activities to do a lot for cohesion of communities. Some people will not go to big bad city (Binghamton). Using the river as a destination would pull people in from other communities. First Night not going on now either; was good clean fun for community that pulled people together, big industries used to do this; First Night used to get 10-15,000 people. St Patrick’s Day Parade is a big draw, also; about 30,000 people.

Whitney Point is working on a comprehensive plan. It is a tiny village that has a large county park, Dorchester, and a school near waterfront. There has been a long term-goal to make connection to the water. There is quaintness to the communities.

There are many visitors to area. Whitney Point has motor boating and sailing at the reservoir. There are boat input areas on the Susquehanna at Stillwater, at Murphy’s Island; and Appalachian has Hiawatha Island.

Dams are an issue regarding continuity on the water. There is one near Johnson City. The restoration of shad fishery would require removal of dams or building fish ladders. The dam at Goudy Station is to be removed.

The Rock Bottom area is used for the city’s water supply.

The waterfronts are extremely diverse with heritage areas such as old canal beds and old buildings on the waterfront that survived, extensive natural areas, gravel beds, and industrial sites. There is also a different perspective from on the water. Importance of healthy buffer on river; river use is important. There was an important shad fishery and restoration of shad is occurring downstream. Shad fishery may have economic benefits. Deposit has a shad run – a resting area for shad during their migration is next to Deposit.

Rivers are so much cleaner now.

Consider Ithaca Farmers Market that is on water as an example of what could be done. Vestal has a farmers market – how about locating it along the waterfront; but water level is low in the summer. There are plans for Otsiningo Park farmers market to do this. However, need to have local businesses benefit from this.

Some of oldest buildings in the region are located in Deposit. One Church literally straddles both counties. The West Branch of the Delaware River has “clean trout water”. The area is booming as a result of this. Also there is the antique’s market - Excel antiques is premier; the Rookery specializes in 18th century antiques – people along all the East Coast come to Deposit for this. The Deposit Historical Society has 20 to 30 buildings on its walking tour. One can walk and fish the river from the coffer dam on down. The village needs something to help them out. They get many people to the historical meetings. The theater has been ‘saved’ several times. The village is hub of creative activity. Fisk comes from Deposit, as does J.P. Morgan and the guy who developed the 401 K. The river is somewhat

removed from Main Street and from other communities – different character, NYC people have access to Deposit, draw from NYC people, possibly also get some to Windsor, three entities are trying to promote Windsor. Philadelphia and , New Jersey residents have summer homes there, woody place to get away, buy produce and eggs and take back to city, cheaper to get here than Hamptons, see bald eagles. Gasland Movie – director is child of one of these New Yorkers who bought land here.

As a new store owner, how to promote building and apartment for locals? – for gas workers? – for art people? – or for NYC people? What do you do for the benefit of the village? The gas pipeline helped the village.

One of the most unique features of our river is the confluence in Binghamton of the Chenango and Susquehanna – an area that used to attract several river activities that drew large crowds to Binghamton.

Educational aspect important, too.

Barge could bring people in – barge taxi – from other parts of county – but no place to dock, Waterman’s Center could help with this, consider getting party boats into the river – pull all docks to middle of lake and make it a festival.

No count of people who boat, run, walk along river; safest way to get downtown from projects was large place along river used as gathering/exposition grounds; now Kmart cuts off a stretch of access to the river. Need to revitalize this area; was used in black community.

Need to get storefronts on riverside – like Rochester; water is a draw to tourists, need views to water.

Bridges give built-in river access points, need to make official with signage, have amenities – grills, picnic areas, parking areas. We need to make it feel safe to leave boat and car there.

In downtown Binghamton, church has parking lot that is empty most of week; hotel is another parking opportunity at Clinton St Bridge; Kmart plaza is opportunity for this. There is no waterfront dining, need this next to river. Celebrate the Rivers festival with brochures available for resources, not well-known what is available – this could help to do this.

Binghamton University’s new president could help and be a part of this study; they have their own festivals – want thing when students are in town – river event in Sept on promenade of river trail.

Have scenic road corridors thru communities that are not by river, need signage to let people know in watershed to make people aware and pull them to the water, people going to Ithaca – don’t have signage in Whitney Pt to pull them in.

Susquehanna River in Windsor area is a scenic stretch; clean, with good fishing, bald eagles, nice islands and channels to boat through for ducks and waterfowl. Downstream not as clean looking; river splits Village of Windsor; lot of old buildings to take advantage of, old rail trail makes access if want, trying to revitalize main street. Art gallery is helping to do this. There are hunting and fishing opportunities.

Great kayak/canoe waterway. Trips can be made from Cooperstown to Windsor. Camping is good along banks/islands. In village, river is close to Main Street and abandoned railway – great opportunity for business and municipality. No sewage treatment upstream. Saturday Farmer’s Market is ~ 1 block from river, right downtown, so benefits other businesses. Court to Clinton St needs revitalization, owner needs to do something. Windsor / Cooperstown run – 70 mile trip – boy scouts do this – 3 day camping, hop from island to island. Great boat launch in Oquaga at old historic bridge, but at Windsor to get out of water it is on private land. Windsor needs more formal boat launches to get back out of river, though.

Diverse waterfront areas, some urbanized areas dominated by flood control structures; need to find spots to access rivers in these areas; there are opportunities for economic development/recreation with modification. Also need documentation of all access places that are available in rural areas; out-of-towners can get in but don’t always know how to get out, opportunity at Endicott golf course and airport. Need to have places to stop and get lunch, need to promote this, need signs for people on the rivers for wayfinding, refreshments, restaurants, distances to places. Erin is working on this with Susquehanna Water. Could put this information on websites or have coupons to print out for local restaurants.

2) What are the top three opportunities and top three challenges for tourism, heritage and economic development related to Broome County’s waterways?

Opportunities:

1. Public parkland available for boat rental/launch, fishing, pavilion, picnic, festivals. Also one block to retail and markets.
2. Main Street Revitalized – our store ‘backs’ look over farm field at river. Need to promote river and stores to help both. Grants for store upgrades? Farm market grant? Coordinate NYSEG and NYSDOT to improve.
3. Scenic Trails Available. We have rails available along river.

Challenges:

1. Costs
2. Marketing
3. Ownership issues/liability/policing – private trail/public mixed

Village of Windsor has the railroad near the river – rail system – rail to trail, private versus public land is an issue, used now for trails but illegal. How cover owners for liability, what about a tax break (tip jar)? How do you police private land; who is allowed on it (4 wheelers, etc.)? Main St - all buildings could have deck out back to look at river. Wal-Mart draws people away from downtown – looking at other ways to promote Main Street – blending with river theme, some areas need major changes, need tax break to help local investors, public parkland – need boat launch, would like to have a village event along river, need land for park space and develop a pavilion, want to tie river to park space and then downtown. Rail station needs to be revitalized.

Opportunities:

1. Mutually reinforcement of riverside trails and waterway used by canoes, etc. with maps and trip suggestions.
2. Engage youth organizations, such as Boy Scouts, in development and use.

Challenges:

1. The uneven flow and depth of the river reduces the navigability of some areas seasonally.
2. Dams block movement over some critical reaches.

Need the development of youth organizations with trails beside river and canoe in river; have events for them to do both; catalyst; get them involved with rivers early in life. Who locally has canoes to rent? There is a group in Great Bend that do this; dragon boating for adults as well as kids.

Opportunities:

1. Annual event celebrating our waterways
2. Signage and public art – consistent signage and public art that serves to educate and is artistic and provides direction and connectivity to our historic villages and towns and city downtown
3. Pedestrian furniture and interactive points of interest: athletics; expansion of trails and bikeways; marketing and promotion; consistency and links on projects

There is an opportunity for large scale annual events at Bing confluence. Signage is important; need it more like public art; in Poughkeepsie have this – metal sign with Hudson River engraved with communities and metal on ground with engraving and directions. There is an opportunity to do this in this area; need consistent signage throughout area; need connectivity of waterways and communities; need more trails near water. Marketing & promotion is important; lot of people pass thru on major roadways – need to market to them; need county entity to oversee this for consistency; cultural tourism connections (from book study) – promote as tourism – economic development.

Opportunities:

1. One or two premiere feature activities on the river each year; i.e. Pops on the River and races for boaters
2. Money for comprehensive signage
3. Money for maps and informational kiosks in relevant riverfront venues

Challenges:

1. Money for an aggressive PR campaign
2. Money for all the above opportunities

Need premiere feature, big draw that is river focused, at the confluence at Binghamton. This makes most sense as the location. Need to focus on waterways in recreation sense for non boaters. Need web site with comprehensive plan with maps that people can print off. Need signage with clear directions; Otsiningo Park could have signage on posts that blend in with park atmosphere (not just metal); need road signs, too, and \$ to make it happen.

Opportunities:

1. Work with FEMA on new local protection to invest in river access to downtowns
2. Collaborate to define “Imagination Zone” along Binghamton/Chenango River Waterfronts
3. Collaborate on maps for water and landside

Challenges:

1. Collaboration/linkages between groups/liaison
2. Money – private investors / good price

Flooding is opportunity and detriment; river access is part of flood wall; get FEMA to pay for it. They are talking about raising level of walls. Buyouts give opportunity in Union and Kirkwood; opportunity to work with FEMA; make link to the “Zone of Imagination”. The funding could come from private sector. Opportunity to collaborate on maps/web; opportunity of Derby Knitting Mills –views to river.

Opportunities:

1. Housing development is bringing people near the rivers; need for more senior housing
2. Events, but need to be linked better to businesses
3. Growing arts community provides opportunities

Challenges:

1. Flood maps are changing
2. Absentee property owners and code enforcement issues / lack of strong regulations/use of zoning tools (mainly for Boards)
3. Money is lacking
4. Linkages/connections

There are continuing housing developments going on in downtown Binghamton. But the City closes up at night; need activity on streets at night. Need not just student housing, but senior housing with existing amenities, events – lot of them, but need to link them to the existing businesses to help them. A growing arts community is an opportunity. New flood mapping is a detriment; need to make areas near river even more attractive due to higher cost to invest in these areas.

Opportunities:

1. Regular feature in local media on historic sites
2. Directory and map of all historic sites
3. Calendar of historic events
4. Historic Building signs (a la Town of Maine)
5. Map of all historic sites in every town
6. Tie-in events for all farmers markets
7. Establishment of artisan markets
8. Establishment of ‘Made in Broome County’ store
9. Quarterly glossy on Broome County (like Finger Lakes Magazine)
10. Need interpretive signage on trails for flora and fauna

Challenges:

1. Funding
2. Communication among stakeholders

Pedestrian furniture is also important along river, also consider athletic facilities course, also need restrooms along trails – not that many of them, need amenity destinations along the trail.

If there are any benefits that extend beyond county lines, two states could link together, then more likelihood to get funding; put this in the report. Funding is also available for health-related items. The report should have documentation of events that occur along the rivers – link those events and make one bigger festival – consider ‘River Days’.

3) How can the Broome County Intermunicipal Waterfront Revitalization Plan best help your organization?

Planning Support – help with getting our goals “listed” or known to the proper support agencies. We can be part of a water link from Cooperstown to Owego and on.

Provide signage and promotion about the opportunities for tourism, history, etc. in each community along the waterways.

Provide opportunities for getting money and support for grant requests. Coordinate and communicate progress.

Broome County Planning Department can provide opportunities to get money for projects that locally can’t afford to do. Environmental Management Council working on natural resources inventory; provides documentation of water resource areas and nice companion document for this effort. EMC may be able to work toward some of the goals and recommendations.

Misc. Comments:

Susan - Looking at museum on waterfront, Ice Cream Factory at 321 Water Street, after cultural tourism, pdf of document, 5 years old – will be updated if possible with students, done by April,

Note: Activities are happening on reservoir/river all times of the year, i.e. “Crappie Derby”

Notice to Attendees and Report recipients: The above is our understanding of the content of the meeting. Please report any inaccuracies or additional information needed to Andy Schrauth at aschrauth@pjscompany.com.

TRAILS, TRANSPORTATION & ENVIRONMENT

FOCUS GROUP

Broome County Intermunicipal Waterfront Revitalization Plan

Wednesday, 9:00 am, Town of Vestal Board Room, February 16, 2011

Attendees:

Erin Heard, Upper Susquehanna Coalition, Headwaters River Trail (Leader), working to develop this and improve access, nutrient & sediment issues

Nina Versaggi, Public Archaeology Facility at Binghamton University, worked on trail projects for public
Scott Clarke, Central NY Research, Conservation & Development, retired from State, 55 acres of land, concerned about outdoors, RCMB head of this subcommittee, kayaker

Eileen Ruggieri, Town of Windsor Representative on LWRP, no public access currently in town or village, want to connect with businesses, bring up history of area, Historic Windsor Advisory Committee, want to see better utilization of river

Janet Ottman, Susquehanna Heritage, Historian, Johnson City, tourism interest

Gail Domin, Broome County Department of Planning & Eco. Dev., provide aid to help

Michael Haas, Haas Landscape Architects

Jim Bukowski, Parks Department, Town of Vestal

Ray Denniston, Town of Conklin, BOCES

Dick Andrus, Envir. Studies at Binghamton University, canoer, naturalist

Mark Bowers, NYSDOT, bicycle, involved with greater Binghamton Greenway

Karen Salvage, Bing University, Geology, groundwater

Evan Romer, Village of Windsor, trying to convert abandoned railroad track to rail trail

Barbara Thomas, NYSDOT, working on safe routes to school, Vestal Rail Trail, etc.

Peter L'Orange, City of Binghamton

Jocelyn Gordon, peter j. smith & company

Andrew Schrauth, peter j. smith & company

Brief Summary of Study by Jocelyn Gordon (brief statement of why people are here and what is to be accomplished)

1) What makes the Broome County waterways unique? How does the character of the riverfronts change from community to community?

Waterfronts are underutilized and under appreciated the entire length. In Australia, river has arts, business, etc. associated with it; here brush all along most of rivers.

The Chenango Canal is also a "riverway" of sorts that is only marked by signs on the road.

I see the river and floodplain as a system, a reservoir for biodiversity (many bird species for example). The floodplain forest is unique; mostly intact on the north side. I take students there and they are not aware of this environment: cluelessness of public on what's there and how good it is. Better

interpretive efforts would allow people to see the river as positive, interesting, beautiful parts of our local environment. There is no interpretation at Otsiningo Park even though that is the only place that they have access to the river's edge.

The Susquehanna and Delaware were the super highways of past; opportunity for interaction for communities in past has great depth, opportunity for heritage tourism not taken. Vestal has significant Native American site. One of defining events in Revolutionary War is Clinton-Sullivan campaign. Native American history unfolded differently in our region because the rivers facilitated travel and interaction with other regions. Early history was also influenced by the path of our rivers. Communities don't realize the depth, significance, educational potential, and heritage tourism opportunities here. Specific areas: Castle Gardens (Vestal), Choconut Creek (Vestal), Susquehanna/Chenango confluence (Binghamton), Windsor.

Historic past has been overlooked in Susquehanna and Broome County. Windsor is near Native American village that burned down; how Clinton-Sullivan campaign affected Native Americans.

Waterways eventually flow into the Chesapeake Bay. Some communities have public access to rivers; some don't. Some have river walkways; most don't. Susquehanna flows from NY to PA and back. There is a unique flood plain situation. Wouldn't it be nice to have something like the 'Potomac Heritage Trail'? Can we go back to using this as a "super highways of learning"? It is a chance to get out and be more alive. It is an underutilized resource; it is an "empty' river". There is a crisis with kids not getting outside and active; need to use this resource.

Regarding safety issues: are there warnings on some of the dams? – Yes. There are also plans to go around Rock Bottom Dam.

Waterfronts are easily accessed; generally clean and very attractive; beautiful. Areas in the City are more susceptible to vandalism and other crime, but an attractive feature of our area. There are bald eagles over the river; brings nature into the urban area.

Rivers tie us all together. Development occurs along rivers. In urban areas rivers are confined by flood walls so they are hard to access; there are some areas where man-made intrusions put up barriers and make river unseen.

One of the most unique aspects is the confluence of Susquehanna and Chenango Rivers in Binghamton. Make this area important. The urban and rural nature of the area allows for numerous opportunities for cultural tourism, recreation, and education. Use Otsiningo Park as hub and go out to rivers. Also, there are opportunities for interpreting the rivers, early cigar rolling manufacturing, ability to interpret nature. Rich history here, opportunity to bring the past to life; rivers provide venue.

There is the unspoiled nature of large portions of the river and riverfront (e.g. the Susquehanna in Windsor and Colesville). When you're on the river, you mostly see river and wildlife. The recreational opportunities are vastly underused and underappreciated. The waterways are not very challenging for

canoe/kayak compared to some rivers; opportunity to take advantage of this; easy for complete novices. The urban portions are underused in a different way – river banks are not unspoiled, but there is an opportunity for more riverbank access.

Susquehanna River is unique in that the Big Bend section goes into Pennsylvania and comes back.

Delaware has a completely different character; strong attraction by people to river edges.

No one canoes/camps along the rivers. There are otters in the river. Canoeing/camping not done because may end up on private property; could facilitate camping along rivers for floaters along river – project could define difference between public or private land.

Erin Heard is hoping to work on a project to enhance map and guides along the Susquehanna River; also include showing where camping areas are along the river.

River is also a trail – blue trail – need an ‘idiots guide’ to river, to respect public lands. Problem is money and education; need to get more people using the river to get people better educated and finances will follow. Access along river doesn’t need to be difficult; only takes one trip down river to understand. When people do come out to trails and river, they become advocates and come back.

If can’t apply science to practical use, it is worthless. Need to educate public to build on projects. Set it up as super highway of learning. Plug in students from Binghamton University to the river and get them working on projects.

Conklin does not have access to river now, but has green space where this can be done - flooding areas. County has put together buy-out property list in the town.

Transportation facilities are not just recreation facilities; active living community; health care. There are a lot of opportunities to get different disciplines together.

Disaster of floods gives an opportunity; people understand not to build in flood plain; need flood plain for parks and trails. Educate about benefit of Mother Nature buffering built environment from flooding; use this and do quickly while fresh in people’s minds; use flood pictures for interpretation/education why not build on flood plain.

Waterman’s Center in Appalachian has pontoon boat for river tours; do not promote as much as should; could help to educate wealth of wildlife on river; environmental education for public. Consider this resource.

Diversity of the communities along river in the County offers multiple approaches. In Windsor, waterfront activity is minimal today compared to the Town’s 200 year old history. Whereas other communities are in a position to develop their waterfront, Windsor has no public access. Making a blueway trail is more important in the Town.

Amount of river frontage, wildlife, much untouched, basically clean, great recreation possibilities, history, greenspace forever.

In Binghamton, the riverfronts have had a recent history of revitalization, leading to the creation of public spaces which are a focal point of the downtown area. It is the tie between nature and city/town in the area.

The rivers are so central to the communities; literally flowing through some (like the City of Binghamton). Binghamton feels “cut off” from the rivers due to the floodwalls, while in other areas (e.g. up by Whitney Point) the water is more accessible. The highways along the river valleys cut people off from the waterways, which is unfortunate.

There is a unique history and proximity to communities: potential for access. Riverfronts are underused and underappreciated in most communities. The City of Binghamton has a good start to incorporating the river into the cityscape.

2a) What are the top three opportunities for trails, transportation and the environment related to Broome County’s waterways?

Sandy Point was huge recreation area for city in past; not now – mainly used for jet skis.

Flood plain can be used for gardening. CHOW urban farming doing it now in Binghamton; good soil, huge potential use for urban berry farms; must do semi-organic or contribute to pollution; great growing; good soils.

The abandoned Delaware & Hudson Railroad line from Harpursville to the Pennsylvania border in Windsor run right along the river (Susquehanna N/S section) and is just beautiful – there is a big opportunity for a rail trail. The combination of rail trail, river access and river views would make an outstanding recreational trail. This also ties into the historic Windsor railroad station, the lenticular bridge in Oquaga, and other historic sites. This would connect to an existing rail-trail in Pennsylvania that runs from the NY border to Forest City; very active; plans to connect to trails to south, natural to connect what we do to this. A person has bought the land, but no one knows what is going on with it. The acquiring of train depot, railroad bed went thru a lot of private property, influenced decision not to move on with project. Town and Village of Windsor had understanding to give train station to village and property around town garage to town; also probably give access for natural gas drilling.

Water in river is technically owned by state.

Be aware there may be another solicitation for NYS TEP projects. This is a funding opportunity; 80/20 split – reimbursed 80 % (however, need to put up all money up front). When soliciting for funding, guess high for determining cost of projects because long process. It must be a transportation project (not recreation); may have aspect of interpretation; need to write grant along transportation issues.

Heritage areas – expanded to all of Broome & Tioga Counties. Funding will be available; now includes Native American stories. With state fund can match transportation fund, 80% funded, 20% match.

Opportunity is the tie between nature aspect and urban/village/town amenities. Would be good to have entire system of water/land trails and have amenities tied to it. Need system wide, use this as piece of how to reinvent area.

Headwater River Trail is planning sojourn trip in NY. It will get permission to camp in areas. They will use local restaurants. Start at Bainbridge June 15.

1. Like the Potomac Heritage Trail (~ 700 mile - looking to join with this) we should maximize both water and land trails - 2 trails - one along river and one on river. First priority should be physical trail along the river.
2. Public access to both trails (water and walking) with a corresponding map
3. Environmental specific map emphasizing learning and heritage

I-86 conversion offers an opportunity to provide more access and connectivity to waterways; tie in with DOT to make additional transportation along portion of highway right of way for bikers and pedestrians. Elmira and towns east have done this. It is a highly visible link ~5 miles long; potential to connect to this from Broome County to Tioga County, link communities along hwy corridor, DOT amenable to idea, already written up in Binghamton LWRP. Can build pedestrian system on or along national highway systems, DOT is doing some of this, funding should be available.

There is new-found greenspace due to FEMA flood property buy-backs and abandonment; offer opportunities for trails, parks and boat access within our river communities. Great opportunity for municipalities; they could provide access. There are ample trails identified on north side of river in Union, Grippen Park and tri cities airport. If in the LWRP, it will make them eligible for funding.

Great potential for environmental education through schools, not-for-profits, etc.

1. Rail-Trail development in rural communities like Windsor
1. "Greenspace forever" – trails – interpretation
1. Full implementation of Greater Binghamton Greenway
2. Implementation of the Whitewater Park and fish ladders at the Rock Bottom dam site
3. Opportunities to interpret the flora and fauna, as well as history within the Greater Binghamton Greenway
1. Flood prevention
2. Parks/trails
3. Interpreting ecology/history
1. We have a series of long, natural areas for pedestrian/bike trails
2. Great source of history
3. Connection between natural and urban

1. Making people aware of the rivers – aware that they can access them (and where!)
2. The opportunity for environmental education (rivers, flood plains, wetlands, habitat, bird watching)
3. The opportunity for outdoor recreation (getting people outside and exercising; getting in contact with nature)

1. River itself as trail
2. Natural areas within urban area along flood plain – currently inaccessible
3. How about a guide to Susquehanna River for people canoeing it

1. Boat portage / camping areas
2. Outdoor educational kiosks (nature, history)
3. Community outreach (especially archaeology programs)

1. Development of a blue trail incorporating culture and history in interpretive signs
2. Headwater River Trail is working with the National Park Service and Chesapeake Conservancy to extend the Captain John Smith National Historic Trail all the way up the main stem of the Susquehanna to NY thru to Cooperstown; this would bring federal recognition and more funding opportunities
3. More outfitters

2b) What are the top three challenges?

May be aspects of projects that impact underground facilities, may be archeological interpretation

1. Money
2. Access
3. Public interest/education

Where are you going to park? How much parking can be made?

1. Outreach and education is important, showing people that the river is an economic engine,; has assets
2. Funding
3. Liability
4. Access

Funding is a challenge, municipalities still have to come up with \$, also \$ for long-term maintenance, with transp. In-kind services can be put toward match of 20% (public involvement and time in terms of \$).

Volunteer groups can be inconsistent with maintenance; municipalities are best for this for core responsibility; still may utilize volunteers. NYSDOT has rules for maintenance; must be kept clear and maintained, but no requirement on how it is to be maintained.

Lack of organization is biggest challenge, ~ 30 miles of trails planned in Binghamton area, ~ 50% in works now, nothing to consistently lead the charge, needs 'Friends of the River' to take up charge to keep it in public's eye, need good base of public support.

1. Public access to river adequate to accomplish projects
2. Public education and interest of the view of the river
3. Monetary constraints
4. Who's responsible for liability w/ Rail-Trails

1. Encroachment on property owners (trails – riverfront)
2. Public education

1. Availability of funding
2. Policy and environmental issues with using, gaining access to, and developing along the river
3. Educating the public and elected officials to the advantages of making these investments

1. USACE/DEC properties and levees
2. Public perception of trails through private properties or municipal roadblocks hamper development
3. Funding for implementation and maintenance
4. Volunteerism from organizations and private/public sources
5. Signage

1. Public safety and liability issues
2. Parking near to boat accesses (if it is in the flood plain - how do you establish parking?)
3. Educating community leaders and elected officials about the heritage/history of the waterway area and the opportunities for recreation and tourism

1. Lack of existing bike/pedestrian connections between existing sections
2. Lack of investment
3. Lack of access to riverfronts

1. The highways and flood walls present very real barriers to contact with the river
2. Funding is a challenge
3. Historic industrial use of some of the near river land has degraded some areas through Vestal/Binghamton
4. Money or manpower to create and maintain signage

1. Money
2. Private property
3. Lack of awareness on part of public as to what would be gained

1. Waterfront development projects should recognize that ground-disturbing activities could impact archaeological sites. Archaeological surveys may be required, but could produce new information on pre-history and history for public interpretation.
2. Private property access issues

1. Establishing as much of a continuous trail system along the river (this can link communities and municipalities with bicycle and pedestrian trails as well as water trails)
2. Funding – municipalities are stressed for funding
3. Long-range, consistent focus on maintenance and liability
4. Conceptualizing the big picture and linking each municipality's super highway of learning
5. Engaging the public in a positive way

Marcellus Shale drilling would drastically undermine recreational/scenic/tourism use of the rivers. At 4 to 16 wells per square mile throughout the county (for decades), it would transform the area into an industrial zone, with 5-acre well pads, a network of access roads and gas gathering pipelines, truck traffic, and air/light/noise pollution (as well as the threat of water contamination).

3) How can the riverfront be physically improved to enhance trails, transportation and the environment in Broome County?

It can be improved by the use of sustainable materials.

It can be improved with a strong educational component regarding sustainability, stormwater, flora/fauna, pervious pavements, etc.

Access, "gentrification" (appearance), interpretation, connections between trails, directions.

Need to incorporate signage along the river system – both wayfinding and interpretive. Also need to have consistent signage - A Broome County: Riverfront Park – Vestal, -Conklin, etc.

Clearing debris; trimming brush but keeping appropriate plants; develop locations where people living and working near the river could eat their lunch, etc.

Better access/connections. Develop a cohesive feel to the trails through signage/interpretation.

A continuous bikeway through Binghamton/Vestal would be wonderful – recreation and exercise, but perhaps also an opportunity for bicycle commuting to work/school.

River and riverfront clean-up of trash periodically would be great. (There is a once-a-year river clean-up.)

Provide access for canoe/kayak/boat access to the water and for walking.

Provide campsites (unimproved) for canoeing/camping.

There is a need for a river guide for recreational use: access points, hazards, guidelines (currently there is no one who knows or no place to find out this information).

More educational signage and kiosks with exhibits.

More “guided” river tours. The Binghamton River Crawl program I guided went from an exhibit at Roberson Museum, to Confluence Park, to the Binghamton University Downtown Academic Center was very popular (> 60 people); lots of follow-up requests. Can more of these enhance other areas?

Implementation strategy

Binghamton river trails

Binghamton Greenway

4) How can the Broome County Intermunicipal Waterfront Revitalization Plan best help your organization?

Provide a database with web access (Erin Heard would be interested in the GIS database from study).

Provide comprehensive signage scheme; need consistent signage for trails/walks (interpretive signs).

Need for map of all public access to rivers in Broome County. Need a breakdown within the project/report for implementing different segments.

Greater Binghamton Greenway will hire consultant to brand greenway in near future. The RFP is soon to go out. But greenway needs to go out to other communities, so this study could help do this.

Set up an organization to add continuity to Greater Binghamton Greenway.

Implementation strategy

County is rolling in implementation; already a lot of committees. May be able to explore in recommendations to utilize these existing committees to forward plans.

Provide organization to lead the plan’s implementation and public support. Work within or expand current system.

Provide education and presentations for local groups. Keep it on the ‘front burner’.

Provide a framework for future planning and development. Provide a creative, authoritative plan from which local communities can work. Provide an implementation strategy.

Provide “context” and identity partnerships to provide organizational structure.

It could help develop interpretive/historic areas.

Provide inviting access to riverfront for observing nature.

Draw tourists to the community who will spend their money in restaurants and shops.

Binghamton is at the confluence, but has limited resources for LWRP development. An intermunicipal waterfront would help create/reinforce the wider connections.

Involving students from Binghamton University as volunteers/interns would provide great experiences for them. Any aspect – developing, environmental education signage, help building hiking trails, community activism, or planning.

We need a “Friends of the River” or “Friends of the Susquehanna River” organization with funded coordinator.

Emphasis placed on public positive access to the rivers (school programs – university and high schools).

Misc. Information:

Jocelyn Gordon gives summary of what’s next.

Draft will be on web site (link from Broome County Parks), also pjs to email sign in sheet to focus group attendees, also send summary of meeting.

Notice to Attendees and Report recipients: The above is our understanding of the content of the meeting. Please report any inaccuracies or additional information needed to Andy Schrauth at aschrauth@pjscompany.com.

Appendix III: GIS Database

III.I Resource Database

Intrinsic Resources

Intrinsic resources are attractions, sites and facilities that relate to the inherent nature of the Broome County Waterfront. By collecting and mapping intrinsic resources, a base of information is created that can be sorted out to determine what resources are along the corridor, what level of quality they are, and if there are any surpluses or deficits of any given type of resource. Intrinsic resources also create a picture of the character of the river corridor. The Broome County Waterfront intrinsic resources are evaluated to:

- ◆ Identify patterns of development occurring that could be enhanced;
- ◆ Develop theme areas along the corridors;
- ◆ Identify areas that can be improved upon and locations for support facilities; and
- ◆ Identify opportunities for themes, clustering and enhancing the resources along the waterfront.

Intrinsic Resources are categorized into culture & history, recreation, tourism, transportation, and water access. Intrinsic resources were collected by a field team that drove all roads within the study area to inventory and locate resources. It was possible for a single resource to fall into two or more categories. The evaluation completed during the inventory was input into an ArcView GIS mapping database. The intrinsic resources are depicted on the map in Figure AIII.1.

Cultural Resources are those sites, both past and present, that capture the unique qualities of the communities and define the history and traditions that set the context for the area's development patterns and the character of the built environment. These include art, archaeological sites, cemeteries, churches, community centers, festival/fairgrounds, historic architecture, monuments, museums and theaters.

Natural Resources are geological formations, wildlife, habitat, topographic, and hydrologic features that define the development of the land along the waterfront of Broome County. These resources are: geology, habitat, landforms, streams, wetlands, wildlife and water.

Recreation Resources include active and passive, public and private facilities and features. These range from public open space to indoor recreation facilities. Recreation resources inventoried are: common space, golf courses (public and private) and sports venues, as well as parks, picnic areas, pools and playgrounds.

Tourism Resources are specifically designed to appeal to, serve and entertain visitors. These resources include interpretive and information centers, accommodations including camping, inns and hotels, theme attractions, theaters, antiques shops and restaurants.

Transportation Resources are land-based (water-based transportation resources are catalogued as Maritime Resources). Those resources are access points, bicycle paths, byways, equestrian trails, scenic overlooks, promenades, trails and rails.

Water Access Resources are water-related attractions and services enabling residents and visitors to gain access to the waterways. These include fishing access points, boat launches and viewing platforms.

The following table presents the distribution of intrinsic resources by type of resource. Some Resources were categorized as two or more types of resource. For example, a hotel that was architecturally significant would have been categorized as a tourism resource and a cultural resource. As a result, the number of resources presented in the table is greater than the 246 inventoried resources.

Each resource was assigned a quality rating from 1 (low) to 5 (high). To assign the rating, consideration was given to: design character/quality of the resource, potential appeal to tourists, and visual contribution to the travel experience. The following table shows the distribution of intrinsic resource by their quality rating.

Table AIII.1 – Intrinsic Resources

Municipality	Cultural	Natural	Recreation	Tourism	Transportation	Water Access	Total
Barker	3			2		2	7
Binghamton	19	1	14	19	7	5	65
Chenango	1		7	6		1	15
Colesville	7		1	3		2	13
Conklin	3		5	6			14
Deposit	9		1	9		5	24
Dickinson			2	4	1	1	8
Endicott	6	1	6	6	1	1	21
Fenton	2	1	2	2	1	2	10
Johnson City	1		1			1	3
Kirkwood	2		3	5		2	12
Lisle				3	1		4
Lisle (Village)	2		2	1			5
Port Dickinson	1		1				2
Sanford	1			3		3	7
Triangle	1	1	1		1	2	6
Union	1		1	7	1		10
Vestal	5	1	5	18	2	1	32
Whitney Point	3		1	3			7
Windsor	9		1	4			14
Windsor (Village)	4		2	3			9
Total	80	5	56	104	15	28	288

Table AIII.2 – Rating of Intrinsic Resources

MUNICIPALITY	1 (Low)	2	3	4	5 (High)	Total
Barker		4	2	1		7
Binghamton		2	11	12	26	51
Chenango		2	4	6	2	14
Colesville	1		4	6	2	13
Conklin	1	2	4	1	4	12
Deposit	1	7	5	5	5	23
Dickinson		1	2	2	1	6
Endicott			4	6	5	15
Fenton		1	1	2	2	6
Johnson City			2		1	3
Kirkwood	1	3	4	2	1	11
Lisle		1	1	2		4
Lisle (Village)		2	1	1		4
Port Dickinson				2		2
Sanford			1	1	4	6
Triangle				2	3	5
Union		3	6	1		10
Vestal		1	13	9	3	26
Whitney Point		2	2	2	1	7
Windsor		3	7	2	1	13
Windsor (Village)		1	3	4		8
Total	4	35	77	69	61	246

The Following presents a list of all the intrinsic resources inventoried along with category designation and quality rating.

RESOURCE NAME	RESOURCE TYPE							MUNICIPALITY
	CULTURAL	NATURAL	RECREATION	TOURISM	TRANSPORTATION	WATER ACCESS	QUALITY	
Barker Rd Bridge						X	3	Barker
Cemetery	X						2	Barker
Knapp Cemetery	X						3	Barker
DEC Fishing Access						X	4	Barker
Dewey's Saloon				X			2	Barker
Extra Buttons Antiques & Collectables				X			2	Barker
Two Forks Cemetery	X						2	Barker
ACE Park			X				4	Binghamton
Anthony's Restaurant				X			3	Binghamton
Artist Row	X						5	Binghamton
Binghamton Club				X			5	Binghamton
Binghamton Information Center				X			5	Binghamton
Binghamton Regency Hotel				X			5	Binghamton
Broome Center for Performing Arts	X			X			5	Binghamton
Broome County Arena				X			4	Binghamton
Chenango Canal Plaque	X						5	Binghamton
Cheri Lindsey Memorial Park			X				5	Binghamton
Clarion Grand Royale				X			5	Binghamton
Clinton Street Bridge	X						4	Binghamton
Columbus Park			X				3	Binghamton
Confluence Park			X		X		5	Binghamton
Corner park VFW Memorial	X		X	X			5	Binghamton
Corner parkette			X				3	Binghamton
Court Street Bridge	X					X	5	Binghamton
Courthouse	X						5	Binghamton
Days Inn				X			3	Binghamton
Exhibit Hall	X						5	Binghamton
Gorgeous Washington Street	X						4	Binghamton
Historical Plaque - Bingham's Patent	X						4	Binghamton
Holiday Inn				X			5	Binghamton
In the Wall				X			3	Binghamton
Linear Parkette (Charles Place)			X				3	Binghamton
Lost Dog Café				X			5	Binghamton
Michael's Restaurant & Lounge				X			4	Binghamton
MLK Promenade Entry	X				X		5	Binghamton

RESOURCE NAME	RESOURCE TYPE							MUNICIPALITY
	CULTURAL	NATURAL	RECREATION	TOURISM	TRANSPORTATION	WATER ACCESS	QUALITY	
Niko's Restaurant				X			3	Binghamton
Number 5				X			5	Binghamton
NYSEG Stadium (Mets) Park				X			5	Binghamton
Park			X				2	Binghamton
Park Diner				X			3	Binghamton
Parkette			X				4	Binghamton
Parkette			X				2	Binghamton
Peace Makers Plaza	X				X		5	Binghamton
Pedestrian Bridge Crossing	X	X			X	X	4	Binghamton
Pedestrian Courtyard					X		5	Binghamton
Red Oak Restaurant				X			3	Binghamton
Riverfront Trail					X	X	4	Binghamton
Riverside Drive Bridge	X						5	Binghamton
Riverwalk					X	X	5	Binghamton
Roberson Museum	X						5	Binghamton
Sake-Tumi				X			3	Binghamton
Sandy Beach Park			X			X	3	Binghamton
Southside Veterans Park			X				4	Binghamton
Spanish/American War Memorial	X						5	Binghamton
The Episcopal Church	X						5	Binghamton
Train Station	X						5	Binghamton
Tyler Park			X				4	Binghamton
Veterans Park/Memorial Gardens	X		X				4	Binghamton
Casey's				X			4	Chenango
Chenango Bridge Park			X				4	Chenango
Chenango Commons Golf Course			X				5	Chenango
Chenango Forks Fishing Access Site						X	4	Chenango
Chenango Ice Rink			X				5	Chenango
Chenango Schoolhouse Museum	X						4	Chenango
Comfort Inn				X			4	Chenango
Howard Johnson				X			3	Chenango
KPA Park - Clint E Brown Memorial Field			X				2	Chenango
Margarita Cantina				X			3	Chenango

RESOURCE NAME	RESOURCE TYPE							MUNICIPALITY
	CULTURAL	NATURAL	RECREATION	TOURISM	TRANSPORTATION	WATER ACCESS	QUALITY	
Neighborhood Park			X				2	Chenango
Riverfront Park			X				3	Chenango
RT Golf Complex/Diner			X	X			3	Chenango
Tokyo Sushi Buffet				X			4	Chenango
DEC Fishing Access						X	5	Colesville
DEC Fishing Access						X	4	Colesville
Enchanted Gardens				X			3	Colesville
Harmony Park			X				1	Colesville
Harpur Cemetery	X						3	Colesville
Harpurville United Methodist Church	X						5	Colesville
Historic Bridge	X						4	Colesville
Nineveh Plains Cemetery	X						3	Colesville
Nineveh Presbyterian Cemetery	X						3	Colesville
Nineveh Presbyterian Church	X						4	Colesville
Once Upon a Time B&B				X			4	Colesville
Pumpkin Pie Farm				X			4	Colesville
Riverview Cemetery	X						4	Colesville
Conklin Cemetery	X						2	Conklin
Conklin Golf Course/Restaurant			X	X			5	Conklin
Dino's Bar & Grill				X			3	Conklin
Floyd Maines Community Center	X		X				5	Conklin
Hallo Berlin North				X			4	Conklin
Jimay's Flee Market				X			3	Conklin
Moxie Woodfire Grill				X			5	Conklin
Park			X				2	Conklin
Povina Restaurant				X			3	Conklin
Schnurbusch Park			X				5	Conklin
Tee Time Minigolf			X				1	Conklin
Temple Israel Riverside/ Beth David Cemetery	X						3	Conklin
Axtel Antiques	X			X			4	Deposit
Crane's Restaurant				X			3	Deposit
DEC fishing Access						X	3	Deposit
DEC Fishing Access						X	5	Deposit

RESOURCE NAME	RESOURCE TYPE							MUNICIPALITY
	CULTURAL	NATURAL	RECREATION	TOURISM	TRANSPORTATION	WATER ACCESS	QUALITY	
Delaware Museum Historical Society	X						5	Deposit
Delaware Plaque	X						5	Deposit
Deposit Motel/Pines Restaurant				X			1	Deposit
Farley's restaurant				X			2	Deposit
Gettysburg Memorial	X						4	Deposit
Katie's café				X			2	Deposit
Laurel Bank Motel				X			2	Deposit
Laurel Hill Cemetery	X						3	Deposit
Laurel Hill Fishing Site						X	3	Deposit
Little Italy Restaurant				X			2	Deposit
Panda Restaurant				X			2	Deposit
Paul Deveraux Historic Marker	X						4	Deposit
Revolution Cemetery	X						5	Deposit
Special Trout Fishing Area						X	4	Deposit
Special Trout Fishing Area						X	4	Deposit
State Theater	X						3	Deposit
Stone Monument Indians-Whites	X						5	Deposit
Town Cryer Restaurant				X			2	Deposit
Warner Community Park			X				2	Deposit
Botanical Gardens/Park				X			4	Dickinson
Econolodge				X			3	Dickinson
Fairfield Inn				X			4	Dickinson
Otsiningo Park			X		X	X	5	Dickinson
Park			X				2	Dickinson
Super 8 Motel				X			3	Dickinson
Endicott Visitor Center				X			5	Endicott
En-Joie Golf			X	X			3	Endicott
Grippen Park			X			X	4	Endicott
Harry Tufts				X			4	Endicott
Historic House Plaque "The Brick Store"	X						5	Endicott
Johnson Endicott Arch	X						5	Endicott
Lampy's Mediterranean Grill				X			5	Endicott
Lighthouse	X						4	Endicott

RESOURCE NAME	RESOURCE TYPE							MUNICIPALITY
	CULTURAL	NATURAL	RECREATION	TOURISM	TRANSPORTATION	WATER ACCESS	QUALITY	
Mersereau Park			X				3	Endicott
Nick's Restaurant				X			3	Endicott
Park - Village of Endicott			X		X		4	Endicott
Riverside Cemetery	X						3	Endicott
Roundtop Park		X	X				4	Endicott
Union Historical Society	X			X			4	Endicott
Veteran's Park	X		X				5	Endicott
Chenango Canal	X						3	Fenton
Chenango Valley State Park		X	X	X	X	X	5	Fenton
DEC Fishing Access						X	4	Fenton
Hillcrest park			X				2	Fenton
Historic Stone Barn	X						5	Fenton
Lily Lake Camp				X			4	Fenton
St. Patrick's Cemetery	X						5	Johnson City
DEC Fishing Access						X	3	Johnson City
Boland Park			X				3	Johnson City
DEC Fishing Access - Kirkwood Pond						X	3	Kirkwood
Del Motel				X			3	Kirkwood
Foothill Motel				X			2	Kirkwood
Hideout				X			3	Kirkwood
Kirkwood Cemetery	X						2	Kirkwood
Kirkwood Cemetery	X						3	Kirkwood
Kirkwood Motel				X			1	Kirkwood
RiverRun II Golf Links			X				4	Kirkwood
Valley Park			X				4	Kirkwood
Veterans River Park			X			X	5	Kirkwood
Wright Motel				X			2	Kirkwood
Amish Furniture Midway Sales				X			4	Lisle
Hydroponic Strawberries				X			3	Lisle
Lighthouse Landing				X			2	Lisle
Overlook					X		4	Lisle
Lisle Cemetery	X						3	Lisle (Village)
Mudlick Antiques				X			4	Lisle (Village)
Park			X				2	Lisle (Village)
WWII Memorial Park	X		X				2	Lisle (Village)
Bevier Wright house	X						4	Port Dickinson
Port Dickinson Community Park			X				4	Port Dickinson
DEC Fishing Access (at bridge)						X	4	Sanford

RESOURCE NAME	RESOURCE TYPE							MUNICIPALITY
	CULTURAL	NATURAL	RECREATION	TOURISM	TRANSPORTATION	WATER ACCESS	QUALITY	
DEC Special Trout						X	5	Sanford
Dream Cabin Estates				X			5	Sanford
Hale Eddy Cemetery	X						3	Sanford
River Run Restaurant				X			5	Sanford
West Branch Angler and Sportsman Resort				X		X	5	Sanford
Dorchester Park			X			X	5	Triangle
Overlook/Pullover					X		5	Triangle
Upper Lisle Bridge						X	4	Triangle
Upper Lisle Cemetery	X						4	Triangle
Whitney Point WMA		X					5	Triangle
Lupo's Char-Pit				X			3	Union
Crossroads Diner				X			3	Union
Endwell Motel & Restaurant				X			2	Union
Julie's Place Antiques				X			3	Union
Kosmos Corner				X			2	Union
Railroad Pedestrian Underpass					X		3	Union
Red Carpet Inn				X			2	Union
Riverhurst Cemetery	X						4	Union
Tony's Restaurant				X			3	Union
William Hill Park			X				3	Union
Amish Woodworks				X			3	Vestal
Arnold's Awesome Pig Stand				X			2	Vestal
Buffet Star				X			3	Vestal
California Grill/Parkway Inn				X			3	Vestal
Canel Bed Plaque	X						3	Vestal
Castle Gardens Park			X				3	Vestal
Chucksters Family Entertainment Center			X				4	Vestal
Comfort Suites				X			4	Vestal
Hampton Inn & Suites				X			4	Vestal
Harold Moore Park			X			X	4	Vestal
Holiday Inn Express				X			4	Vestal
Howard Johnson				X			3	Vestal
Italian Kitchen				X			4	Vestal
Kampai Restaurant				X			3	Vestal
Marriot Courtyard				X			4	Vestal
Memorial Park	X		X				4	Vestal
Peter's Legacy Diner				X			3	Vestal
Quality Inn & Suites				X			3	Vestal

Broome County Intermunicipal Waterfront Public Access Plan

RESOURCE NAME	RESOURCE TYPE							MUNICIPALITY
	CULTURAL	NATURAL	RECREATION	TOURISM	TRANSPORTATION	WATER ACCESS	QUALITY	
Rail Trail					X		4	Vestal
Skylark Motel Diner				X			3	Vestal
Binghamton University	X	X	X	X	X		5	Vestal
Take a Break				X			3	Vestal
Vestal Diner				X			3	Vestal
Vestal Hills Memorial Park	X						5	Vestal
Vestal Motel				X			3	Vestal
Vestal Museum	X						5	Vestal
Aiello's Ristorante				X			5	Whitney Point
Cemetery	X						4	Whitney Point
Country Kitchen Restaurant				X			2	Whitney Point
Episcopal Church	X						3	Whitney Point
Fairgrounds	X						3	Whitney Point
Point Motel				X			2	Whitney Point
River Crossing Park			X				4	Whitney Point
Cemetery	X						2	Windsor
East Windsor Cemetery	X						2	Windsor
Golden Oak Golf Course			X	X			4	Windsor
Historical Plaque - "Wausaunia"	X						2	Windsor
Knox Cemetery	X						3	Windsor
North Windsor Berries				X			3	Windsor
Ouaquaga Bridge	X						5	Windsor
Pinecrest Camping				X			3	Windsor
Riverside Cemetery	X						4	Windsor
South Windsor Cemetery	X						3	Windsor
The Grange	X						3	Windsor
Transfiguration Gift Shop				X			3	Windsor
Wake Cemetery	X						3	Windsor
China Star				X			3	Windsor (Village)
Kennedy's Diner				X			2	Windsor (Village)
Klump Park			X				4	Windsor (Village)
Old Stone House Museum	X						3	Windsor (Village)
Village Trains & Hobbies				X			4	Windsor (Village)
Windsor Park	X		X				4	Windsor (Village)
Windsor Village Cemetery	X						3	Windsor (Village)
Windsor Whip Works	X						4	Windsor (Village)

III.II Scenic Resources

Broome County offers a wide variety of scenic resources. The focus of this inventory is the natural destinations and the connectors that can potentially comprise scenic corridors. A scenic resource is a positive visual experience that can be employed to assist in the preparation of the waterfront access plan. The purpose of evaluating the scenic resources of a region is to define points and corridors of visual interest. The information has three uses: to preserve and enhance attractive views, to capitalize on good views in order to develop unique, usable and attractive places or travel experiences and to use scenic corridors to link intrinsic clusters for a more valuable visitor experience.

The Scenic Resources within the waterfront study area were inventoried in five categories: distant views, enclosed views, overlooks, panoramas and tunnel effects. They are briefly described below and mapped in Figure AIII.2.

Distant Views – Those views whose character is far off and can include a number of elements composing the entire picture.

Enclosed Views – Enclosed views are somewhat opposite of distant views. In the enclosed view, the viewer’s eye is stopped within the frame of the view.

Overlooks – As the name implies, overlooks are generally from the perspective of height. Unlike panoramas (below) the main element in an overlook is not the horizon itself but an element of the horizon. Additionally, an element of the foreground may also be visually interesting.

Panorama – Panoramic views are continuous scenes that are cohesive in character and representative of one set or group of elements.

Tunnel Effect – As the name suggests the tunnel effect is formed when an element being viewed forms a natural tunnel.

The following table shows the distribution of inventoried scenic views by type.

Table AIII.3 – Scenic Resources

Municipality	Distant View	Enclosed	Overlook	Panorama	Tunnel Effect	Total
Barker	3	1	7	1		12
Binghamton			9	13		22
Chenango			3			3
Colesville	3		4	4		11
Conklin				4		4
Deposit	1		2	1	1	5
Dickinson				1		1
Endicott			1	1		2
Fenton			3			3
Kirkwood			1	1		2
Lisle	3		4	1		8
Port Dickinson			1			1
Sanford			3	2		5
Triangle	2		2	3		7
Union	1					1
Vestal	2		1	1		4
Whitney Point	2		1			3
Windsor	8		5	1		14
Windsor (Village)			1			1
Total	25	1	48	34	1	109

The inventory of scenic resources also included an assessment of the scenic quality of each resource. Scenic quality measures the visual appeal of the scenic resources vis-à-vis their relationship with the waterfront. Each view was evaluated on a scale of one (worst) to five (best). The following table presents the distribution of scenic views by quality rating. No view was evaluated at the lowest rating.

Table AIII.4 – Scenic Quality

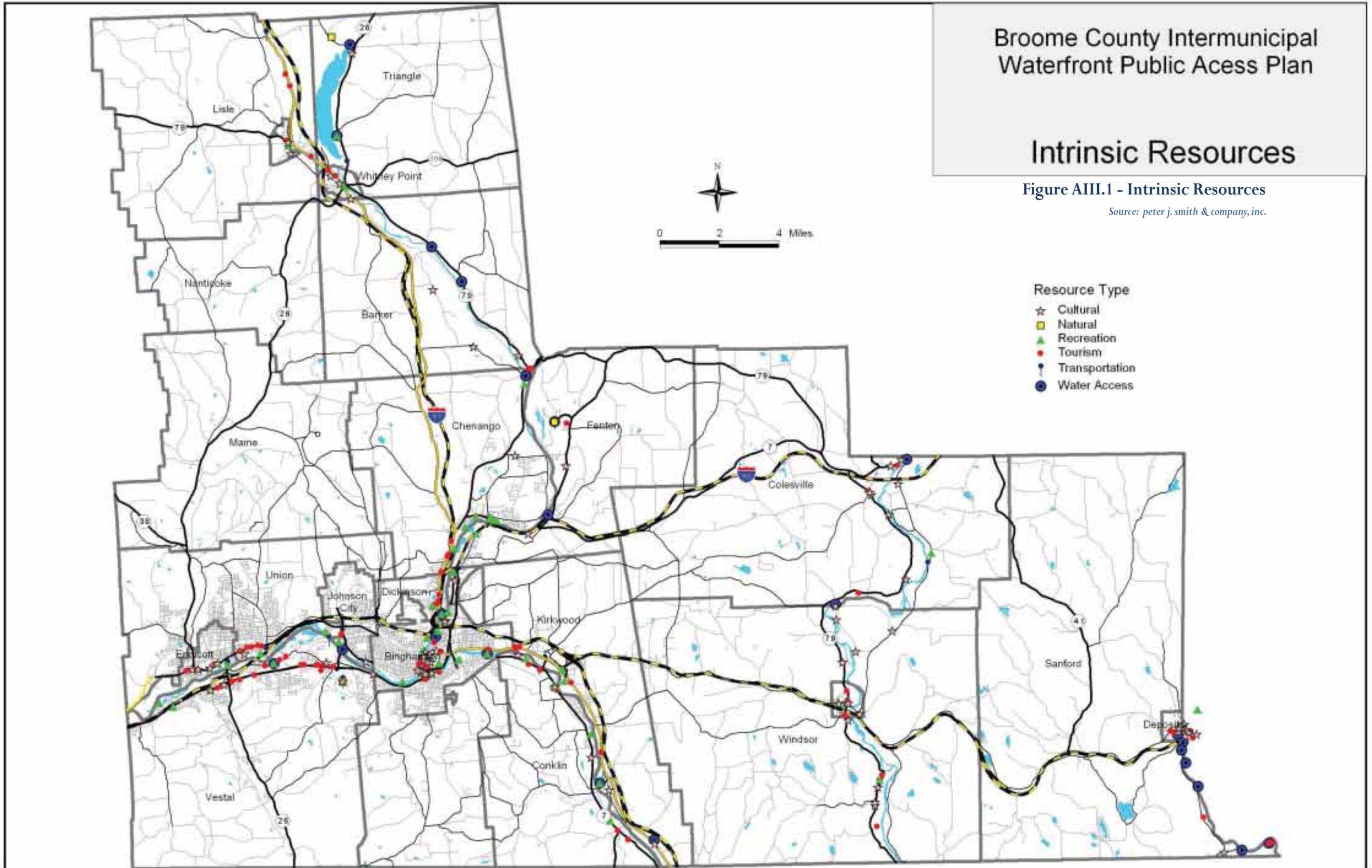
Municipality	Quality Rating				Total
	2	3	4	5	
Barker		9	3		12
Binghamton	1	3	6	12	22
Chenango		1	2		3
Colesville		3	2	6	11
Conklin		2		2	4
Deposit		2	2	1	5
Dickinson		1			1
Endicott			2		2
Fenton	1	2			3
Kirkwood			1	1	2
Lisle	1	4	1	2	8
Port Dickinson		1			1
Sanford			2	3	5
Triangle		1	2	4	7
Union		1			1
Vestal		1		3	4
Whitney Point		3			3
Windsor	6	2	6		14
Windsor (Village)		1			1
Total	9	37	29	34	109

Broome County Intermunicipal Waterfront Public Access Plan

Intrinsic Resources

Figure AIII.1 - Intrinsic Resources

Source: peter j. smith & company, inc.

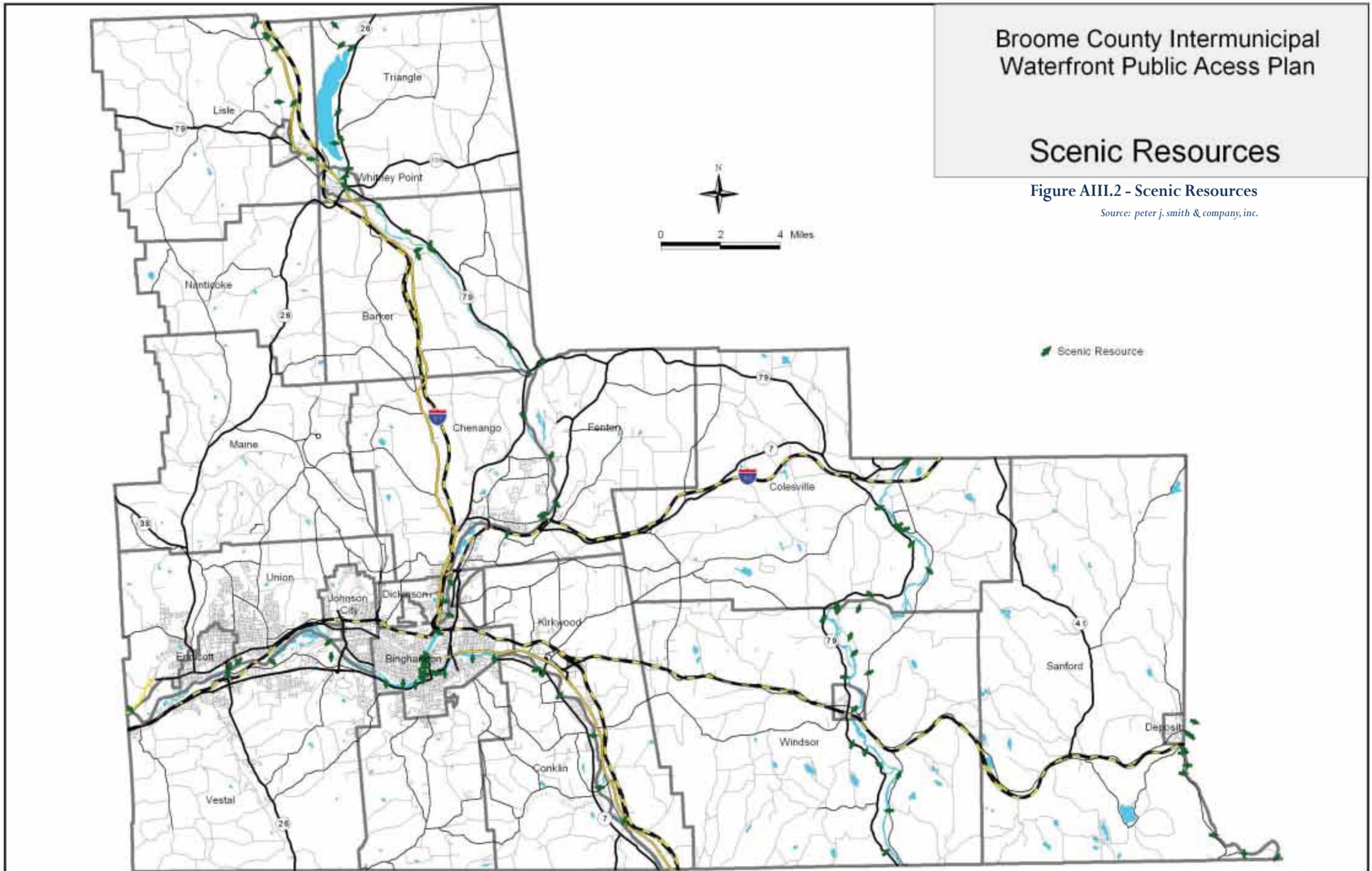


Broome County Intermunicipal Waterfront Public Access Plan

Scenic Resources

Figure AIII.2 - Scenic Resources

Source: peter j. smith & company, inc.



Appendix IV: Funding Sources

The following is a description of funding sources, outside of Broome County, that may be applicable to the waterfront projects. It is not an exhaustive list, but is meant to provide a starting point for funding research.

IV.I State Administered Grants

Environmental Protection Fund Local Waterfront Revitalization Program

On an annual basis, the Department of State solicits grant applications from local governments for 50/50 matching grants from the New York State Environmental Protection Fund's Local Waterfront Revitalization Program (LWRP).

The Office of Parks, Recreation and Historic Preservation

This agency offers a number of useful grant programs, including the Environmental Protection Fund (EPF), Clean Water/Clean Air Bond Act and various federal programs that it administers. Under these programs, OPRHP provides grants for historic preservation and heritage area projects. In addition to these grants, agency staff provide technical assistance in the areas of project design and review, and certification for historic preservation tax credits.

Parks Program: A matching grant program for the acquisition or development of parks and recreational facilities for projects to preserve, rehabilitate or restore lands, waters or structures for park, recreation or conservation purposes. Funds may be awarded to municipalities or not-for-profits with an ownership interest, for indoor or outdoor projects and must reflect the priorities established in the New York Statewide Comprehensive Outdoor Recreation Plan (SCORP).

Historic Preservation Program: A matching grant program to improve, protect, preserve, rehabilitate or restore properties listed on the National or State Registers of Historic Places. Funds are available to municipalities or not-for-profits with an ownership interest.

Heritage Areas Program: A matching grant program for projects to preserve, rehabilitate or restore lands, waters or structures, identified in a management plan approved by the Commissioner. Projects must fall within a New York State Designated Heritage Area.

Acquisition: A matching grant program for the acquisition of a permanent easement or fee title to lands, waters or structures for use by all segments of the population for park, recreation, conservation or preservation purposes. To be used for all three program areas where acquisition is of more importance than development.

Land and Water Conservation Fund (LWCF) Program: A matching grant program for the acquisition, development and/or rehabilitation of outdoor park and recreation facilities. Funds are available to municipal public agencies and Indian tribal governments. Funded projects must reflect the priorities established in SCORP and be available to the general public. Source of funds: The National Park Service.

Recreational Trails Program: A matching grant program for the acquisition, development, rehabilitation and maintenance of trails and trail-related projects. Funds are available to non-profit organizations, municipal, state and federal agencies, Indian tribal governments and other public agencies and authorities. Funded projects must be identified in, or further a specific goal of, the SCORP and must be available to the general public. Grants range from \$5,000 to \$50,000, for the building of a trail or piece of a trail. It is a reimbursement grant program (sponsor must fund 100% of the project up front) and requires a 20% local match. This is an annual program, with an application deadline at the end of January. The available funds are split such that 30% goes towards motorized trails, 30% to non-motorized trails, and 40% is discretionary for trail construction. Source of funds: Federal Highway Administration (FHA).

Certified Local Government Program: A matching grant program for the expansion and maintenance of the National Register of Historic Places and support of historic preservation activities, to include survey and inventory. Only Certified Local Governments may apply. Source of funds: The National Park Service

Department of Transportation (DOT)

The New York State DOT funds and implements environmental benefit projects that improve water quality, restore wetlands, promote eco-tourism, protect fish and wildlife, and enhance transportation corridors through its Environmental Initiative.

The Governor's Office for Small Cities (GOSC)

This agency administers the Community Development Block Grant Program for the State of New York. The Community Development Block Grant Program provides grants to eligible cities, towns, and villages with a population under 50,000 and counties with an area population under 200,000 to revitalize neighborhoods, expand affordable housing and economic opportunities and or improve community facilities and services.

IV.II Federal Grants

Transportation Enhancement Funding

Over the past several years, funding for special transportation enhancement projects (TEP) has been available through a series of federal initiatives, including the Intermodal Surface Transportation and Efficiency Act (ISTEA) and the Transportation Enhancement Act for the 21st Century (TEA 21). Eligible activities under these programs included historic preservation research, planning, acquisition, and development projects that are along transportation corridors, are related to surface transport facilities, or improve the quality of a highway and its surrounding area.

Section 1047 – National Scenic Byways Program:

This component of TEA-21 is designed to protect and enhance America's designated scenic roads. Money is available for planning, safety and facility improvements, cultural and historic resource protection, and tourism information signage. Bicycle and pedestrian facilities can be developed in conjunction with scenic roadway projects. Some states with Scenic Byway Programs have developed greenways in conjunction with this initiative.

Watershed Protection and Flood Prevention (Small Watersheds) Grants

The USDA Natural Resource Conservation Service (NRCS) provides funding to state and local agencies or nonprofit organizations authorized to carry out, maintain and operate watershed improvements involving less than 250,000 acres. The NRCS provides financial and technical assistance to eligible projects to improve watershed protection, flood prevention, sedimentation control, public water-based fish and wildlife enhancements, and recreation planning. The NRCS requires a 50-percent local match for public recreation, and fish and wildlife projects.

Economic Development Grants for Public Works and Development of Facilities

The U. S. Department of Commerce, Economic Development Administration (EDA), provides grants to states, counties and cities designated as redevelopment areas by EDA for public works projects that can include developing trails and greenway facilities. There is a 30-percent local match required, except in severely distressed areas where federal contribution can reach 80 percent.

Design Arts Program

The National Endowment for the Arts (NEA) provides grants to states and local agencies, individuals and nonprofit organizations for projects that incorporate urban design, historic preservation, planning, architecture, landscape architecture and other community improvement activities, including greenway development. Grants to organizations and agencies must be matched by a 50-percent local contribution. Agencies can receive up to \$50,000.

IV.III Grants through Private Foundations and Corporations

Many communities have solicited greenway funding from a variety of private foundations and other conservation-minded benefactors. Some grants are:

American Greenways Eastman Kodak Awards

The Conservation Fund's American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants (\$250 to \$2000) to stimulate the planning, design and development of greenways.

REI Environmental Grants

Recreational Equipment Incorporated (REI) awards grants to non-profit organizations interested in protecting and enhancing natural resources for outdoor recreation. The company calls on its employees to nominate organizations for these grants, ranging from \$500 to \$8,000, which can be used for the following:

- ◆ Protect lands and waterways and make these resources accessible to more people
- ◆ Better utilize or preserve natural resources for recreation
- ◆ Increase access to outdoor activities
- ◆ Encourage involvement in muscle-powered recreation
- ◆ Promote safe participation in outdoor muscle-powered recreation, and proper care for outdoor resources

Bikes Belong

Bikes Belong Coalition is sponsored by members of the American Bicycle Industry. The grant program is a national discretionary program with a small budget, to help communities build TEA-21-funded projects. They like to fund high-profile projects and like regional coalitions. An application must be supported by the local bicycle dealers (letters of support should be attached). Bikes Belong also offers advice and information on how to get more people on bikes. Government and non-profit agencies are eligible and no match is required. The maximum amount for a grant proposal is \$10,000. Applications may be submitted at any time and are reviewed as they are received.

Appendix V: Waterfront Project Listings

Waterfront Projects by Location

9 City of Binghamton

- RPI 6 City of Binghamton, Rock Bottom Dam Park
- T 3 Vestal, Johnson Cty, Binghamton, The Little Loop
- T 4 Binghamton, Susq River North Bank Trail
- T 5 Binghamton, Susq River South Bank Trail
- T 6 Binghamton, Conklin, The Big Bend Trail
- T 9 Binghamton, Dickinson, The North Loop Trail
- SO 3 Binghamton, Confluence at Public Works Bldg
- SO 6 Binghamton, Chenango Street
- IS 2 Binghamton, Confluence Park

1 Town of Barker

- P 3 Tioughnioga Riv W. Bank, Town of Barker

5 Town of Chenango

- HCBL 5 Town of Chenango at Chenango Forks
- FA 3 Town of Chenango, Rte 12 Park & Ride
- T 10 Chen-Fen Loop Trail
- P 2 Town of Chenango, Chenango River West Bank
- SO 7 Town of Chenango, River Road

5 Town of Colesville

- IS 6 Harpursville, Center Village Bridge
- T 7 Harpursville to Pennsylvania Rail Trail
- TH 5 Town of Colesville, Mountain Road
- TH6 Town of Colesville, East Windsor Road
- SO 5 Town of Colesville, Main Street

5 Town of Conklin

- RPI 8 Town of Conklin, Alta Road New Park
- T 6 Binghamton, Conklin, The Big Bend Trail
- P1 Town of Conklin, Corporate Parkway Wetland Trail
- TH 2 Town of Conklin, Corporate Parkway Wetland Trail
- IS 3 Town of Conklin, Corporate Parkway Wetland Trail

3 Town of Dickinson

- BLR 6 Town of Dickinson at Ostiningo Park
- T 9 Binghamton, Dickinson, The North Loop Trail
- IS 7 Town of Dickinson, Otsiningo Park

4 Town of Fenton

- RPI 15 Town of Fenton, Gravel Pit Area Park
- IS 8 Town of Fenton, Historic Lock
- T 10 Chen-Fen Loop Trail
- HCBL 4 Town of Fenton, Chenango Valley State Park

3 Town of Kirkwood

- BLR 5 Town of Kirkwood near PA border
- RPI 7 Town of Kirkwood, Pine Camp
- RPI 9 Town of Kirkwood, Veterans River Park

4 Town of Lisle

- HCBL 7 Hamlet of Kilawog in Lisle Township
- RPI 16 Town of Lisle, Dudley Creek
- SO 9 Town of Lisle, Routes 79/11
- SO 10 Town of Lisle, Dudley Creek

0 Town of Sanford

2 Town of Triangle

- T 13 Whitney Point Reservoir Trail
- SO 8 Town of Triangle, Near Dam at Whitney Point

3 Town of Union

- HCBL 1 Town of Union, William H. Hill Park
- BLR 3 Village of Endwell near Riverhurst Cemetery
- T 2 Vestal, Union, Endicott, The Big Loop

9 Town of Vestal

- BLR 1 Town of Vestal at Castle Gardens Park Expansion
- RPI 1 Town of Vestal, Castle Garden Park
- RPI 4 Town of Vestal, Turtle Tower Park
- T 1 Town of Vestal Rail Trail Extension
- T 2 Vestal, Union, Endicott, The Big Loop
- T 3 Vestal, Johnson Cty, Binghamton, The Little Loop
- TH 1 Vestal at old RR Bridge
- SO 1 Town of Vestal, Proposed Vestal Rail Trail Extension
- IS 1 Town of Vestal, Mouth of Choconut Creek

7 Town of Windsor

- HCBL 2 Town of Windsor, CR 14 (State Line Road)
- T 7 Harpursville to Pennsylvania Rail Trail
- TH 3 Town of Windsor, CR 14 (State Line Road)
- SO 4 Town of Windsor, CR 14 (State Line Road)
- IS 4 Town of Windsor, RK Ashley Memorial Marker
- IS 5 Town of Windsor, Ouaquaga Bridge Site
- IS 6 Harpursville, Center Village Bridge

5 Village of Deposit

- RPI 12 Village of Deposit, Fireman's Park
- FA 1 Deposit at Mill Street along Creek
- FA 2 Deposit at River Street
- T 8 Deposit, River Street Trail
- RPI 13 Deposit, River Street Park

4 Village of Endicott

- RPI 2 Village of Endicott, Roundtop Park
- RPI 3 Village of Endicott, Mersereau Park
- T 2 Vestal, Union, Endicott, The Big Loop
- BLR 2 Village of Endicott at Grippen Park

4 Village of Johnson City

- BLR 4 Village of Johnson City at Boland Park
- RPI 5 Johnson City, Boland Park
- T 3 Vestal, Johnson Cty, Binghamton, The Little Loop
- SO 2 Johnson City, East of Boland Park

0 Village of Lisle

1 Village of Port Dickinson

- RPI 14 Village of Post Dickinson, Wilfrey Park

5 Village of Whitney Point

- HCBL 6 Village of Whitney Point near Rte 11 bridge
- T 11 Village of Whitney Point to Existing Dam Trail
- T 12 Village of Whitney Point to Village of Lisle Trail
- FA 4 Village of Whitney Point, jct. of Tioughnioga & Otselic
- FA 5 Village of Whitney Point, adjacent to I-87

5 Village of Windsor

- HCBL 3 Village of Windsor near Chapel Street Bridge
- RPI 10 Village of Windsor, Village Community House
- RPI 11 Village of Windsor, Klump Park
- T 7 Harpursville to Pennsylvania Rail Trail
- TH 4 Village of Windsor at Old Train Station

Waterfront Projects by Category

7 Hand-Carry Boat Launches

- HCBL 1 Town of Union, William H. Hill Park
- HCBL 2 Town of Windsor, CR 14 (State Line Road)
- HCBL 3 Village of Windsor near Chapel Street Bridge
- HCBL 4 Town of Fenton, Chenango Valley State Park
- HCBL 5 Town of Chenango at Chenango Forks
- HCBL 6 Village of Whitney Point near Rte 11 bridge
- HCBL 7 Hamlet of Kilawog in Lisle Township

16 Riverside Park Improvements

- RPI 1 Town of Vestal, Castle Gardens Park
- RPI 2 Village of Endicott, Roundtop Park
- RPI 3 Village of Endicott, Mersereau Park
- RPI 4 Town of Vestal, Turtle Tower Park
- RPI 5 Johnson City, Boland Park
- RPI 6 City of Binghamton, Rock Bottom Dam Park
- RPI 7 Town of Kirkwood, Pine Camp
- RPI 8 Town of Conklin, Alta Road Park
- RPI 9 Town of Kirkwood, Veterans River Park
- RPI 10 Village of Windsor, Village Community House
- RPI 11 Village of Windsor, Klump Park
- RPI 12 Village of Deposit, Fireman's Park
- RPI 13 Village of Deposit, River Street Park
- RPI 14 Village of Port Dickinson, Wilfrey Park
- RPI 15 Town of Fenton, Gravel Pit Area Park
- RPI 16 Town of Lisle, Dudley Creek

13 Trails

- T 1 Town of Vestal Rail Trail Extension
- T 2 Vestal, Union, Endicott, The Big Loop
- T 3 Vestal, Johnson Cty, Binghamton, The Little Loop
- T 4 Binghamton, Susquehanna River North Bank Trail
- T 5 Binghamton, Susquehanna River South Bank Trail
- T 6 Binghamton, Conklin, The Big Bend Trail
- T 7 Harpursville to Pennsylvania Rail Trail
- T 8 Village of Deposit, River Street Trail
- T 9 Binghamton, Dickinson, The North Loop Trail
- T 10 Chen-Fen Loop Trail
- T 11 Village of Whitney Point to Existing Dam Trail
- T 12 Village of Whitney Point to Village of Lisle Trail
- T 13 Whitney Point Reservoir Trail

3 Pathways

- P 1 Town of Conklin, Corporate Parkway Wetland Trail
- P 2 Town of Chenango, Chenango River West Bank
- P 3 Town of Barker, Tioughnioga River West Bank

7 Boat Launch Ramp

- BLR 1 Town of Vestal at Castle Gardens Park Expansion
- BLR 2 Village of Endicott at Grippen Park
- BLR 3 Village of Endwell near Riverhurst Cemetery
- BLR 4 Village of Johnson City at Boland Park
- BLR 5 Town of Kirkwood near Pennsylvania Border
- BLR 6 Town of Dickinson at Ostiningo Park

5 Fishing Access

- FA 1 Village of Deposit at Mill Street along Creek
- FA 2 Village of Deposit at River Street
- FA 3 Town of Chenango, Rte 12 Park & Ride
- FA 4 Village of Whitney Point, junction of Tioughnioga & Otselic
- FA 5 Village of Whitney Point, adjacent to Interstate 81

8 Interpretive Sites

- IS 1 Town of Vestal, Mouth of Choconut Creek
- IS 2 Binghamton, Confluence Park
- IS 3 Town of Conklin, Corporate Parkway Wetland Trail
- IS 4 Town of Windsor, RK Ashley Memorial Marker
- IS 5 Town of Windsor, Ouaquaga Bridge Site
- IS 6 Harpursville, Center Village Bridge
- IS 7 Town of Dickinson, Otsiningo Park
- IS 8 Town of Fenton, Historic Lock

10 Scenic Overlooks

- SO 1 Town of Vestal, Proposed Rail Trail Extension
- SO 2 Johnson City, East of Boland Park
- SO 3 Binghamton, Confluence at Public Works Bldg
- SO 4 Town of Windsor, CR 14 (State Line Road)
- SO 5 Town of Colesville, Main Street
- SO 6 Binghamton, Chenango Street
- SO 7 Town of Chenango, River Road
- SO 8 Town of Triangle, Near Dam at Whitney Point
- SO 9 Town of Lisle, Routes 79/11
- SO 10 Town of Lisle, Dudley Creek

6 Trailheads

- TH 1 Town of Vestal at old RR Bridge
- TH 2 Town of Conklin, Corporate Parkway Wetland Trail
- TH 3 Town of Windsor, CR 14 (State Line Road)
- TH 4 Village of Windsor at Old Train Station
- TH 5 Town of Colesville, Mountain Road
- TH 6 Town of Colesville, East Windsor Road

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