2.4 PUBLIC ACCESS AND RECREATION

River access in Jamestown is mixed: in certain reaches the banks are gentle and access is reasonable, while in others, steep topography discourages pedestrian access. These conditions make pedestrian/bike linkages between the River and surrounding neighborhoods difficult. As a result, waterfront access is limited throughout the LWRP Study Area as described below.

PUBLIC ACCESS

As described in previous sections, formal access to the River for fishing opportunities and scenic views are afforded by Jones Memorial Park, McCrea Point Park, Panzarella Park, Riverwalk, and Keelboat Landing. Soon, the proposed Phase V (*Chadakoin Park Bike Trail*) and Phase VI Riverwalk Trail extension projects and the new Chadakoin Park boundary (which includes waterfront property) will also provide fishing opportunities and scenic views. McCrea Point Park provides the only formal public boat launch. All of these areas of formal River access are located within the **Chadakoin Outlet District** and the **Downtown District**. No formal River access points are located within the **Industrial Heritage Corridor** or the **East End Industrial Corridor**.

As a response to the limited number of avenues of formal River access, the public has created numerous informal access points throughout the LWRP Study Area (see Figure 12). These informal access points include (by sub-area):

- **Chadakoin Outlet District** – an informal boat launch and fishing opportunities at Jones Memorial Park and an informal boat launch off of Clifton Avenue
- **Downtown District** – informal trails to access fishing opportunities under the shelter of the West 6th Street and WNY&PA Railroad Bridges (three informal trails to this location from Fairmount Avenue along the east side of the River and Old Trolley Building, from Fairmount Avenue along the west side of the River, and from Steele Street along a footpath that begins at a small parking area near the southwestern bridge abutment); along the Third Street Bridge from Steele Street; west of and under the Washington Street bridge on the north side of the River; behind the Gateway Center located on Water Street; and near the former United Lumber low head dam between Harrison Street and Winsor Street
- **Industrial Heritage Corridor** – informal trails to access fishing opportunities near the utility crossing low head dam from Buffalo Street and Allen Street

- **East End Industrial Corridor** – informal and private trails for exercise and to access fishing opportunities located along the River on the north side of Blackstone Avenue behind the Dahlstrom Building; behind the Hope's Windows Complex near the Hopkins Avenue Bridge (private); and through vacant parcels located off the east side of Bigelow Avenue. Access could easily be facilitated by clearing the brush around an existing set of concrete steps located at the northeast abutment of the Tiffany Avenue Bridge.

RECREATION

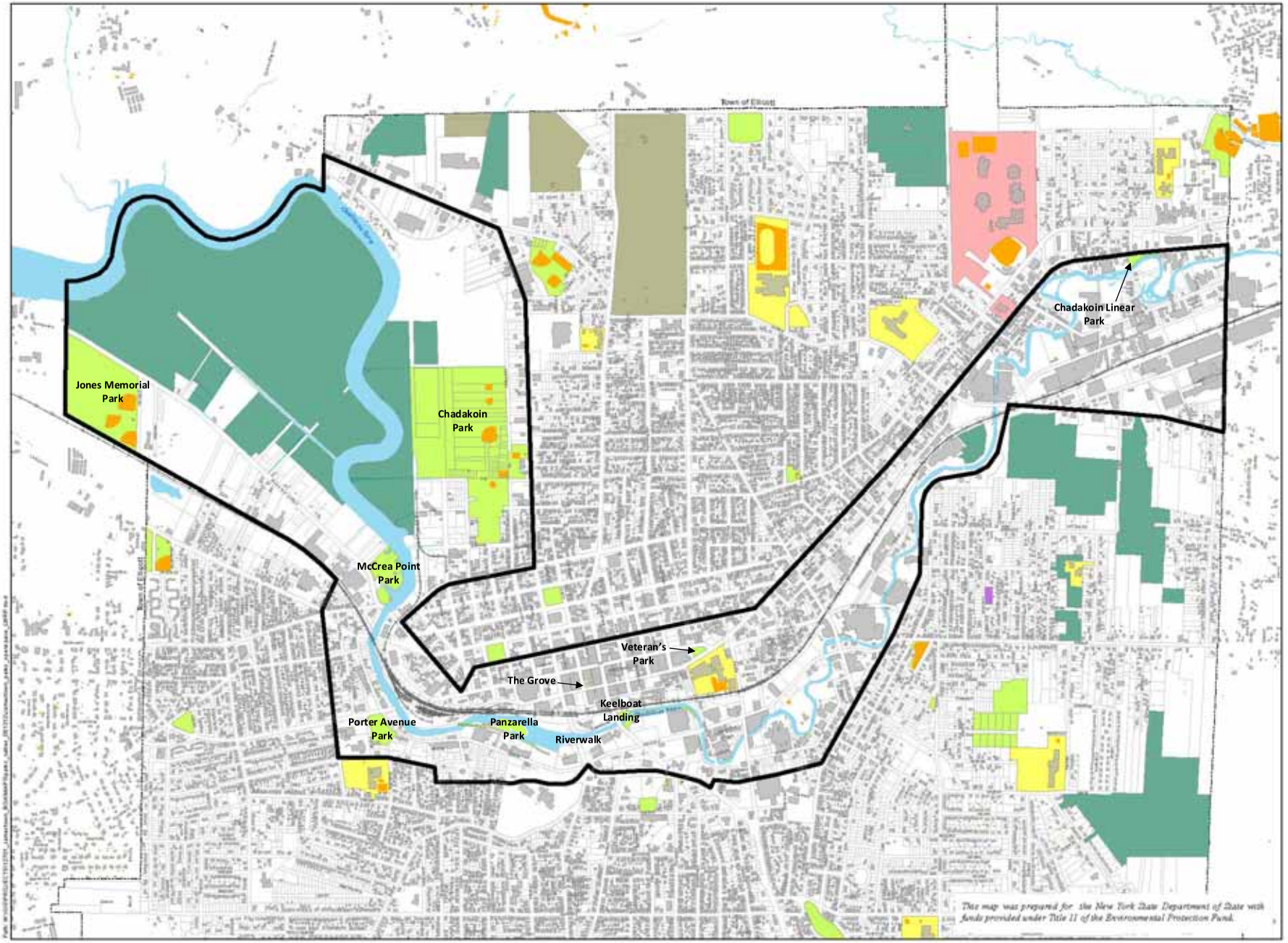
Recreational opportunities for the public are clustered in the **Chadakoin Outlet District** and the **Downtown District**. These public recreational locations are described below and shown in Figure 14:

Jones Memorial Park is a 60-acre park located on both sides of Jones and Gifford Avenue at the western City limits. The section north of Jones and Gifford Avenue is undeveloped, extremely marshy, and largely inaccessible save a small informal trail which connects to the River providing fishing opportunities, an informal location for launching kayaks and canoes, and scenic views. The section south of Jones and Gifford Avenue contains three softball fields and restrooms.

Chadakoin Park is a 152-acre park located off of Washington Street. The park includes a baseball field, softball fields, basketball courts, picnic shelters, playground equipment, a skateboard park, restrooms, and acres of open space. The boundaries of the park recently changed via an alienation process through New York State, which allowed the exchange of a portion of the park (which was being used by the City's Department of Public Works to store demolished construction material) for three parcels along the River, resulting in direct access to the River from the Park.

McCrea Point Park is a 5.6-acre park located northeast of the intersection of Jones and Gifford Avenue and Fairmount Avenue. This park offers boat launches, scenic views of the River, fishing opportunities, picnic pavilions, and playground equipment.

Porter Avenue Park is a 2.9-acre park located on the hillside between Porter Avenue and Steele Street. Historically, this park included a switchback trail system connecting the southern residential neighborhoods located on the hill down to the River. These trails are no longer formally maintained; however the public's continual use has created informal foot paths down to the valley floor. Currently the park is dominated by forested land.



Biohabitats

CITY OF JAMESTOWN

LOCAL WATERFRONT REVITALIZATION PROGRAM

PARKS & OPEN SPACE

- LWRP Study Area
- Recreational Area
- Cemetery
- College/University
- Municipal Park
- Open Space
- Playground
- School

Sources:
1. City of Jamestown Local Waterfront Revitalization Program Work Plan Map - Edited by Labella to reflect steering committee revisions
2. Open space designations extracted from Parcels data layer
3. Wetland and Surface Water layers provided by Chautauqua County
4. Recreation Area layer provided by the BPU

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Labella Project No: 212251

Figure 14. Parks and Open Space Map

Panzarella Park is a 1.2-acre park located adjacent to the BPU Electrical Generation facilities. This park is currently the western terminus of the southern portion of Riverwalk and provides scenic views of the River, limited fishing opportunities, limited docking opportunities, and picnic facilities.

Keelboat Landing is a 0.4-acre park located on the north side of the River and east side of Main Street. This park is the eastern terminus of the northern portion of Riverwalk and provides scenic views of the River, limited fishing opportunities, and picnic facilities.

Riverwalk is a linear trail located on the south side of the River from Panzarella Park to Harrison Street (0.7 mile) and on the north side of the River from Keelboat Landing to several hundred feet beyond the Washington Street bridge (0.4 mile). This trail provides scenic views of the River, fishing opportunities, and opportunities for active forms of transportation (including walking, jogging, skating, and biking).

The Grove is a 0.08-acre pocket park located at East 2nd Street and Cherry Street. The park includes a picnic area and game tables.

Veteran's Park is a 0.4-acres park located at the intersection of East 2nd Street and East 3rd Street. The park includes the Veteran's Memorial.

Chadakoin Linear Park is a 0.7-acre site located between East 2nd Street and the River across from Wendy's. It is the only formal parkland located within the LWRP Study Area yet outside of the **Chadakoin Outlet District** and the **Downtown District**; however, the site is heavily wooded, extremely steep, and public use of the park is minimal.

2.5 HISTORIC AND CULTURAL RESOURCES

Despite its rich history, the City of Jamestown only contains six sites listed in the National Register of Historic Places. Of these, three are within the LWRP Study Area as shown in Figure 15.

- ***The Wellman Building***, located at 101-103 West Third Street, is currently in the final stages of restoration and will hold commercial space on the ground floor with a mixture of apartment styles in the upper floors. It was originally built in 1897 with a masonry bearing wall structure. An addition was built in 1910 with a steel frame structure. Both the original building and the addition were built in the Renaissance Revival style and were designed by Aaron Hall & Son of Jamestown, NY. The building was added to the National

Register of Historic Places in 2009 as its architecture embodies the distinctive characteristics of the time period it was built and as it is a rare and surviving example from a prominent and locally significant architect.

- ***The Erie Railroad Station***, located at 211-217 West Second Street, was recently restored and includes public spaces (including a visitor center) and commercial/retail space that are currently available for lease. The station was constructed in 1931-1932 for the Erie Railroad in a modern / art deco style. In 1960, it was passed on to Erie Lackawanna and served as a station for the railroad's long distance trains. The station has not been utilized by a train since 1970. The building was added to the National Register of Historic Places in 2009 as its architecture embodies the distinctive characteristics of the time period it was built and as its association with railroad transportation played such an important role in the growth and development of the City.

  The City, in collaboration with the Lucy Desi Center for Comedy, has recently begun preliminary plans and designs to use ***the Erie Railroad Station*** and several adjoining parcels to create the *National Comedy Center*. The *Comedy Center* would include exhibits to learn about comedians from the past and both indoor and outdoor performance space to watch current and up-and-coming comedians. The *National Comedy Center* would greatly promote Jamestown's tourism industry and act as a catalyst for the redevelopment of Jamestown's waterfront (to be discussed in further detail in the *Proposed Projects* section of this Report).

- ***The Jamestown Armory***, located at 34 Porter Avenue, is currently occupied by Troop B, 2nd Squadron 101st Cavalry. It was built in 1932 in the Tudor Revival-style for Company E, 174th Infantry Brigade. It was designed by State architect William Haugaard. The building was added to the National Register of Historic Places in 1995 as it is architecturally and historically significant as a representative example of an early twentieth century armory built to house a local unit of the New York Army National Guard.

The Fenton History Museum and Research Center (registered as the Governor Reuben Fenton Mansion in the National Register of Historic Places) is located just outside of the LWRP Study Area. Many other important historic buildings, not included in the National Register of Historic Places, are protected through the City's Historic Preservation Overlay District as discussed previously in the *Zoning and Other Land Use Regulations* section of this Report and depicted on Figure 7.

Additionally, the City of Jamestown has a Historical Marker Program. Nearly 50 Historic Markers are located at important sites throughout the City and explain

Jamestown's unique local history. Over 30 of these Historic Markers are located in the LWRP Study Area.

The Fenton History Museum and Research Center also created a self-guided walking tour brochure which provides a map and route to explore Jamestown's architecture, museums, outdoor sculptures, and public art. Twenty-three culturally and historically important sites are included on the tour. Sixteen of these sites are located within the LWRP Study Area.

Also shown in Figure 15, are Archeological Sensitivity Areas identified by the NYS Office of Parks, Recreation, and Historic Preservation indicating where the discovery of archeological sites is predicted. These areas include the northern and southern portions of the **Chadakoin Outlet District**, the western portion of the **Downtown District**, the eastern portion of the **Industrial Heritage Corridor**, and the entire **East End Industrial Corridor**. Archaeologically Sensitive Areas are defined as the location of past focused human activities, defined in close proximity of continuous distribution of artifacts. The State Historic Preservation Office (SHPO) should be consulted prior to any ground disturbing or excavation within these sensitive areas.

SCENIC RESOURCES

In many places, the view of the River is limited due to vegetation and/or topography. However, certain segments of the River offer fabulous views. The following sections describe notable scenic locations along the various reaches of the River and are depicted in Figure 16:

- **Chadakoin Outlet District** – This area is characterized by areas open in nature with views of the wetland and some detrimental views of post industrial lands. Typical viewers are boaters, public park (McCrea Boat Landing) users, and motorists. Notable scenic locations include:
    - Within the channel between the outlet and McCrea Point Park (boaters only)
    - From McCrea Point Park and the Fairmount Avenue Bridge
- **Downtown District** – The western portion of the area has only limited views due to the steep topography, while the more westerly portions offer better views owing to a broader, flatter, flood plain. There are several good opportunities in the public domain to gain a sweeping view of this area.
    - Under the West 3rd Street Bridge
    - Panzarella Park

- Along the Riverwalk
- Washington Street Bridge
- Main Street Bridge
- Keelboat Landing Park
- Harrison Street Bridge and along Institute Street
- Institute Street Bridge

- **Industrial Heritage Corridor** – Access to the River is limited due to the presence of a number of privately owned properties, steep topography, the railroad, and dense vegetation. In this area, views of the River are essentially limited to the following bridges:
  - Winsor Street Bridge
  - Chandler Street Bridge
  - Buffalo Street Bridge

- **East End Industrial Corridor** – As with the Industrial Heritage Corridor, access to the River in this area is limited due to the presence of a number of privately owned properties, steep topography, the railroad, and dense vegetation. In this area, views of the River are essentially limited to the Hopkins and Tiffany Avenue Bridges.



(Left) View south from the Fairmount Avenue Bridge. (Center) View from under the West 3rd Street Bridge. (Right) View from the Riverwalk Trail towards the South Main Street Bridge.



(Left) View north from the Harrison Street Bridge near Institute Street. (Center) View north from the Harrison Street Bridge near Winsor Street. (Right) View east from the Winsor Street Bridge.





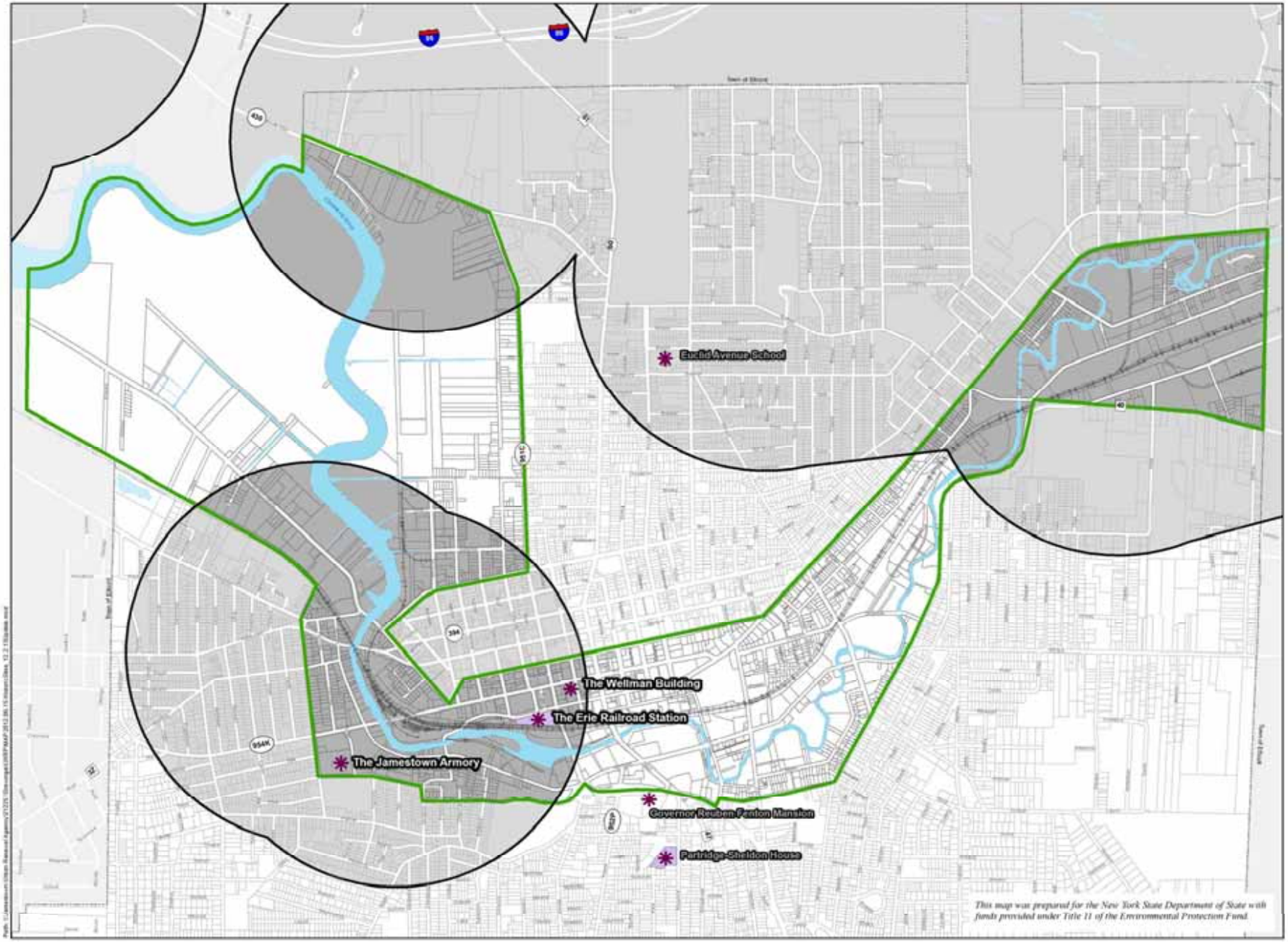
(Left) View south from under the WNY&PA Railroad Bridge near Buffalo Street. (Center) View south from the Buffalo Street Bridge. (Right) View west from the Tiffany Avenue Bridge.

In general, the City possesses many unsightly industrial, commercial, and abandoned properties along and/or near the waterfront. Scenic views of the River would improve if these sites were properly screened and/or cleaned up. The following list includes *examples of sites* which, if properly screened and/or cleaned up, would improve the overall aesthetics of the waterfront (see Figure 16):

- **Chadakoin Outlet District** –
    - Properties near Chadakoin Park, primarily along Monroe and Clinton Streets, that are prone to illegal dumping should be cleaned up and access should be limited
- **Downtown District –**
    - The Weitsman Scrap Yard should be properly screened from the River and the Chadakoin Park Bike Trail
    - The Trolley Building should be demolished and the site cleaned up
    - Portions of the Lennox property near the River should be cleaned up
- **Industrial Heritage Corridor –**
    - Abandoned / highly underutilized properties along River Street should be cleaned up and/or demolished and prepared for shovel ready sites
    - The vacant parking lot on Allen Street (which is often used by the City for dumping lawn and other landscaping debris) should be cleaned up
- **East End Industrial Corridor** – Most properties in this sub area are well maintained. The limited amount of scenic views results from the presence of a number of privately owned properties, steep topography, and dense vegetation along the length of the River rather than from an abundance of unattractive and derelict sites. Increasing the number of scenic views along this stretch of the River will most likely only occur through agreements

between private property owners and the City to allow public access along the waterfront at appropriate locations such as:

- Through the Dahlstrom Complex
- Behind the Hope's Window Complex (near Hopkins Avenue)
- Vacant parcels located off the east side of Bigelow Avenue



LABELLA Associates, PC

CITY OF JAMESTOWN

LOCAL WATERFRONT REVITALIZATION PROGRAM

Historic and Archeologic Resources

LWRP Study Area

Historic & Archeologic Resources

National Register Historic Place

Archeological Sensitive Area

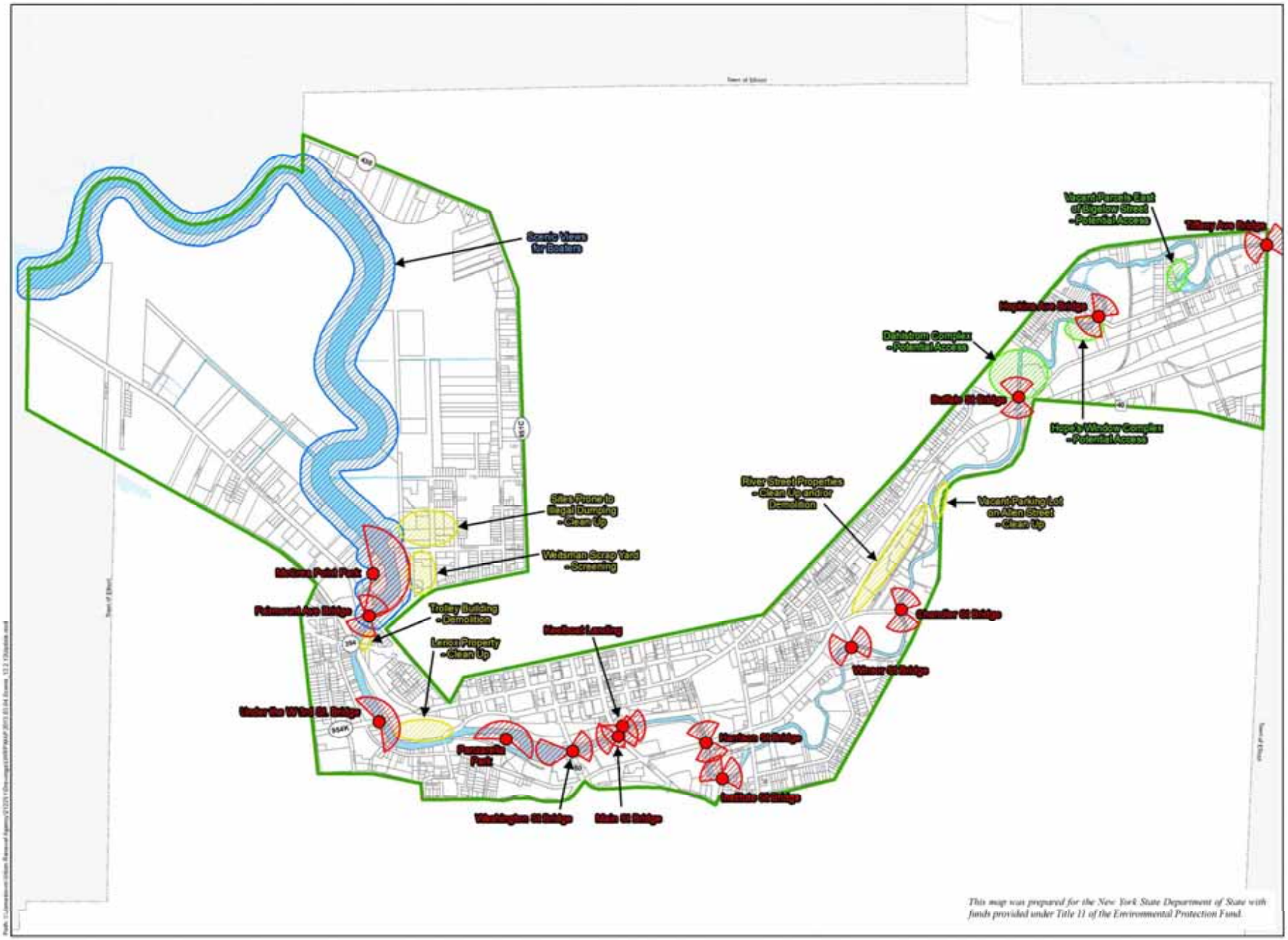
Sources:
1. City of Jamestown Local Waterfront Revitalization Program Work Plan Map - Edited by LaBella to reflect steering committee revisions
2. National Register of Historic Places and Archeological Sensitive Areas digitized from NYS Historic Preservation Office online mapping tool

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Labella Project No: 212251

Figure 15. Historic and Archeologic Resources Map



LABELLA Associates, PC

CITY OF JAMESTOWN

LOCAL WATERFRONT REVITALIZATION PROGRAM

Scenic Resources

Labella Project No: 212251

Figure 16. Scenic Resources Map

2.6 PUBLIC INFRASTRUCTURE

The City of Jamestown's early development and rich industrial heritage has resulted in the creation of a complete infrastructure system that services the entire LWRP Study Area. As described below (and in further detail in Supporting Document 4: Inventory and Analysis of Transportation and Municipal Infrastructure Systems), the infrastructure is in good shape although it is underutilized due to population and employment losses that have occurred over the past few decades.

WATER SUPPLY

The Board of Public Utilities (BPU) was created in 1923 to own and operate the City's potable water infrastructure. Currently, the BPU provides potable water to approximately 48,000 people in the City of Jamestown and the Villages of Falconer, Lakewood and Celoron, along with parts of the Towns of Ellicott, Busti and North Harmony. The potable water system is supplied from raw water pumped from aquifers in Cassadaga and Levant. There are two water storage reservoirs in the City: the 10-million gallon capacity English Hill Reservoir and the 1.5-million gallon capacity Buffalo Street Reservoir. Water is provided throughout the LWRP Study Area by an extensive water distribution network. The system is relatively old but has been well maintained. Waterline breaks occur occasionally, but not at a higher frequency than expected for a system of its age and type of construction. Because the water system was designed to serve a larger population than what exists today in the City, there is additional capacity for new development in the Study Area; however, proposed developments that may require unusually high volumes of potable water should be evaluated on a case by case basis. The potable water distribution system within the LWRP Study Area is shown on Figure 17.

WASTEWATER DISPOSAL

Like many communities that had busy waterfronts in the 1800s, Jamestown's wastewater and stormwater simply flowed back to the waterfront. The earliest reference to a sanitary sewer system within the City indicates that the use of a formal wastewater disposal system began at the corner of Sprague and West Second Streets in April, 1893.

The original system discharged into the Chadakoin River approximately three miles east of the City line. By the 1920s, Jamestown had its first wastewater treatment plant. The original plant was replaced by a more advanced facility located in Falconer, New York in 1956. The plant was expanded in 1966 to provide secondary

treatment, and again in 1983 when tertiary treatment capabilities were constructed. The plant is currently permitted to discharge 12,000,000 gallons per day into Cassadaga Creek, which flows into the Chadakoin River downstream of Jamestown. As with the potable water system, the wastewater collection and treatment system is old but has been well maintained. Because the wastewater collection and treatment facilities were designed and constructed to serve a larger population than what exists today in the City, there is additional capacity for new development in the LWRP Study Area: however, proposed developments that may require pretreatment or unusually large loadings at the wastewater treatment plant should be evaluated on a case by case basis.

STORMWATER RUNOFF AND STORM DRAINAGE

The City of Jamestown is too small to meet the State threshold for a Municipal Separate Storm Sewer System (MS4) so therefore MS4 regulations do not apply. Additionally, the vast majority of the existing development predates current stormwater regulations. Although current NYSDEC and USEPA stormwater regulations and design criteria are incorporated into the City's site plan review process, there is very little new development in Jamestown in which these regulations and criteria are implemented. As a result, the majority of stormwater is discharged to the LWRP Study Area with little or no treatment. Jamestown is largely "built-out" with a high percentage of impervious surfaces. When rain is not allowed to infiltrate into the ground two problems are created. The first is a high flow of stormwater runoff into street storm sewers and ultimately nearby streams, often overwhelming collection facilities and resulting in accelerated erosion and flooding. The second is a phenomenon called first flush, which refers to the idea that the stormwater which initially runs off an area will contain higher pollutant loads/concentrations than subsequent stormwater generated for a prolonged rain event. This can be important for stormwater management as first flush collection systems can be employed to capture and isolate this most polluted runoff, with subsequent runoff being diverted directly to the stormwater system.

Stormwater was once combined with wastewater, but today is separate. Stormwater is collected from the streets, basement drains and roof gutters by laterals and trunk lines, which in turn discharge into the Chadakoin River or associated wetlands. In some cases, open channels have been excavated in the wetland areas beyond the outfalls to facilitate drainage. Although the City's stormwater collection system is old and not completely mapped, it is fairly well understood.

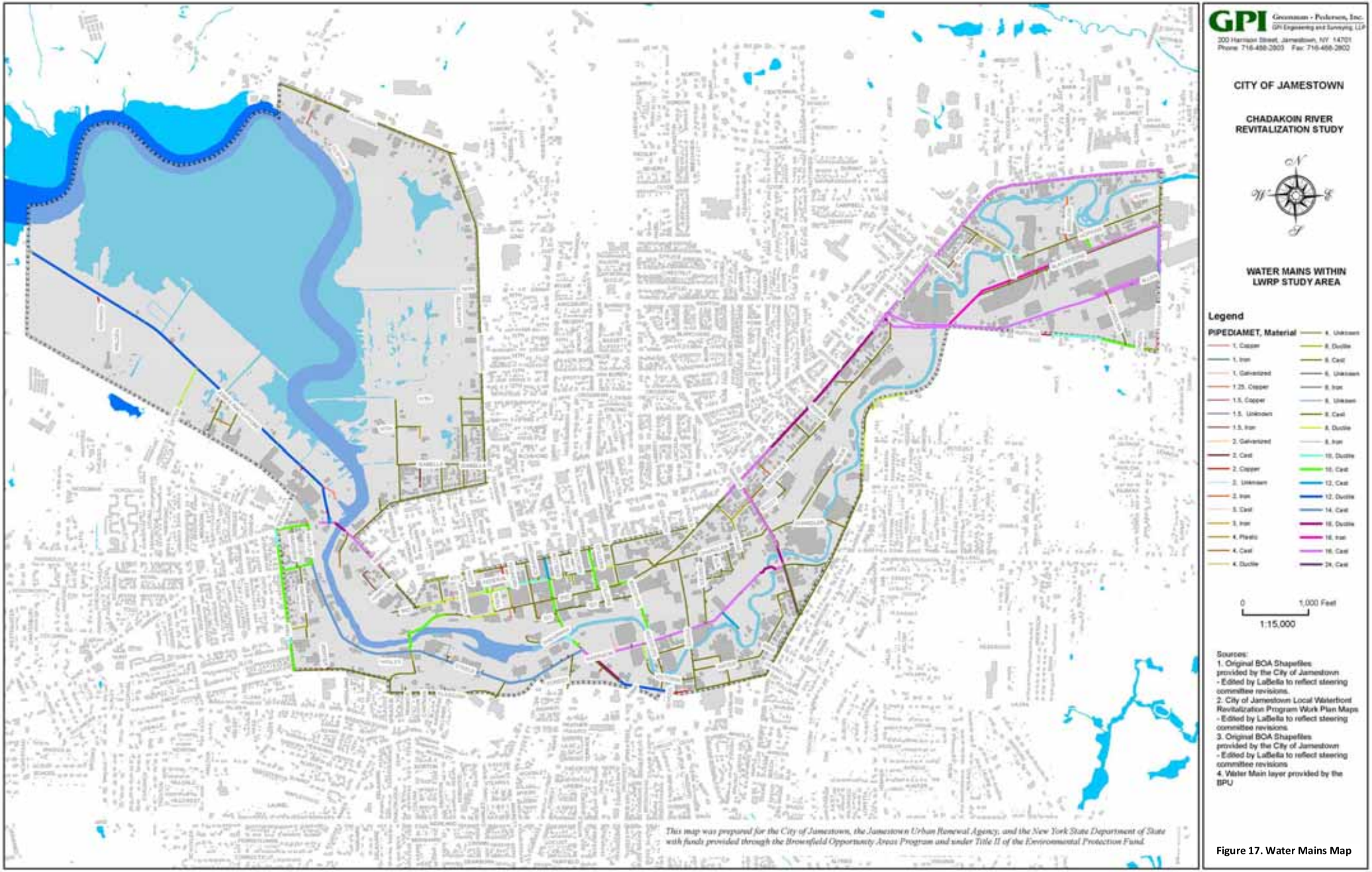


Figure 17. Water Mains Map

The City uses a variety of stormwater inlets; however, the City standard is a cast in place design with a large sump for collecting gravel, silt and debris. The design features a cast iron cover that provides easy access for cleaning by City DPW crews. Below are photographs of some of the different stormwater inlets that are observed in the Study Area.



(Left) Stormwater inlet in the Dahlstrom parking lot. (Center) City of Jamestown standard stormwater inlet at parking lot along Harrison Street. (Right) Cast iron stormwater inlet on Institute Street.

The stormwater collection and piping system as well as the stormwater outlets are constructed from a variety of materials. The materials and applications vary greatly, depending upon the age of the piping. Below are photographs of some of the different stormwater outlets that are observed in the Study Area.



(Left) Stormwater discharge near Allen St. (Center) Stormwater discharge from Steele St. (Right) Stormwater discharge above Foote Ave.



(Left) Stormwater outlet at Foote Ave. (Center) Stormwater outlet at Institute St. (Right) Dual stormwater outlets near the Washington St.

SOLID WASTE DISPOSAL

The BPU's Solid Waste Division collects solid waste throughout the LWRP Study Area.

The BPU has an established recycling program for glass, metals, plastic, paper and cardboard. There is also a household hazardous waste disposal program offered to BPU customers sponsored by Chautauqua County twice per year.

The solid waste is in turn taken to the Ellery Landfill, located at 3889 Towerville Road in Ellery, New York, approximately 12 miles from the Study Area. Chautauqua County owns and operates this solid waste disposal facility, which also accepts solid waste from other municipalities outside of the County at a higher rate. This preferential rate structure provides an economic advantage to businesses that are located within Chautauqua County and the City of Jamestown.

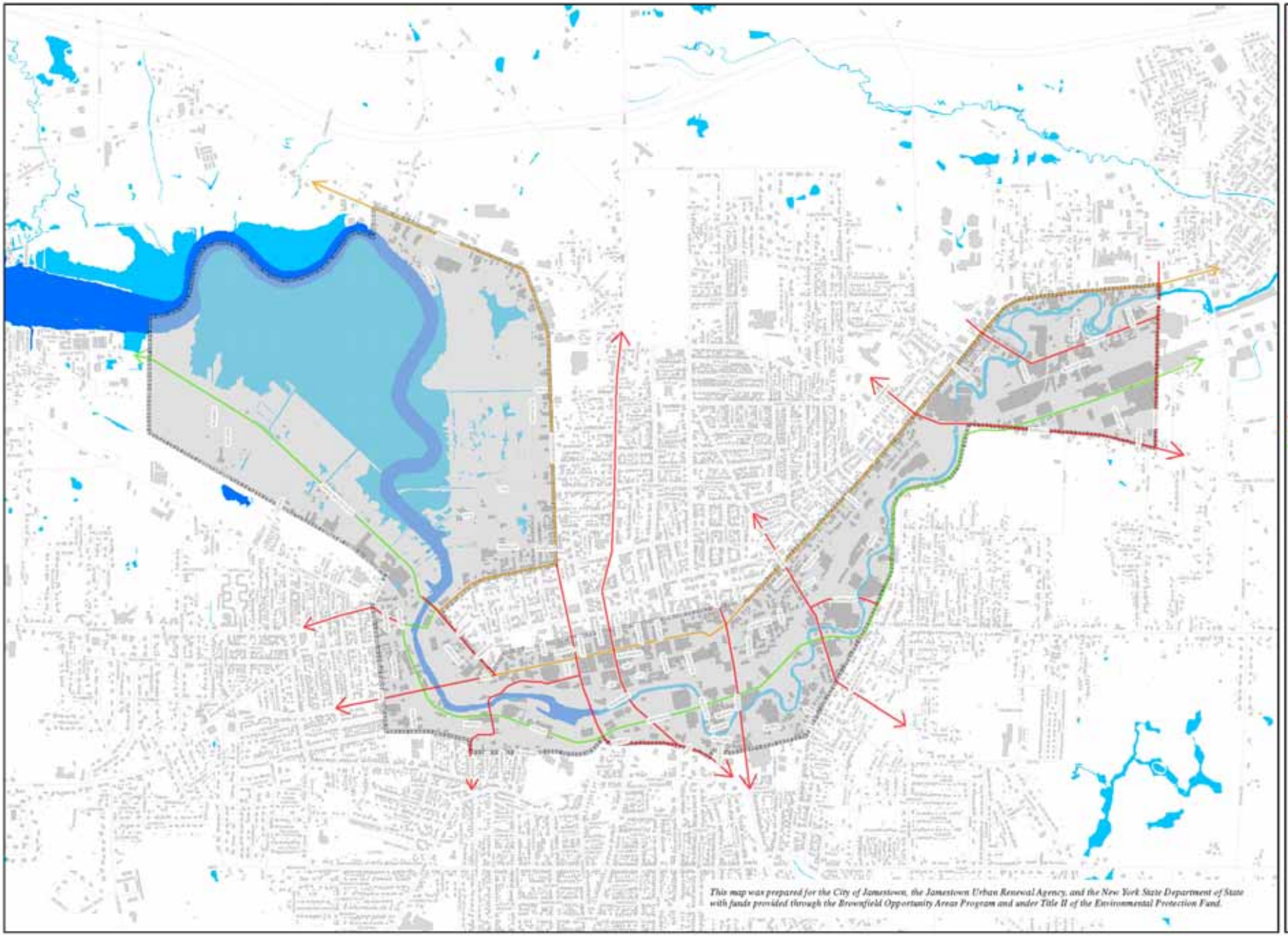
TRANSPORTATION SYSTEMS

The Study Area and City of Jamestown as a whole are served by multiple transportation systems. These include water (as previously discussed in the *Vessel Use and Navigation* section of this Report), vehicular, transit, rail, pedestrian/bicycle, and parking systems as described below.

VEHICULAR

The Study Area is served with a well-developed network of roadways as described below and depicted in Figure 18.

There are two primary routes (consisting of multiple roadways) that traverse the Study Area and are generally parallel to the Chadakoin River. On the north side of the Chadakoin River, the Study Area can be traversed in an east to west direction by traveling segments of NYS Route 394 (East 2nd Street), East and West 3rd Streets, Fairmount Avenue, West 8th Street, Washington Street and NYS Route 430 (Fluvanna Avenue). Each roadway segment and its NYSDOT Functional Classification are identified below (Table 18).



GPI Greenman - Pedersen, Inc.
GPI Engineering and Surveying, LLP
200 Harrison Street, Jamestown, NY 14701
Phone: 716-488-2900 Fax: 716-488-2902

CITY OF JAMESTOWN

CHADAKOIN RIVER REVITALIZATION STUDY

VEHICLE CIRCULATION SYSTEM WITHIN LWRP STUDY AREA

Legend
- CONNECTORS & FLY OVERS
- NORTH SIDE VEHICULAR CORRIDOR
- SOUTH SIDE VEHICULAR CORRIDOR

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Sources:
1. Original BOA Shapefiles provided by the City of Jamestown - Edited by LaBella to reflect steering committee revisions.
2. City of Jamestown Local Waterfront Revitalization Program Work Plan Maps - Edited by LaBella to reflect steering committee revisions
3. Original BOA Shapefiles provided by the City of Jamestown - Edited by LaBella to reflect steering committee revisions

Figure 18. Vehicle Circulation Map

Table 18. Functional Classification of Roads North of the River

Street Name	NYSDOT Functional Classification
NYS Route 394 (West 2nd Street)	Principal Arterial
East 3rd Street	Local Street
West 3rd Street	Minor Arterial
Fairmount Avenue	Local Street and Minor Arterial
West 8th Street	Local Street
Washington Street	Minor Arterial
NYS Route 430 (Fluvanna Avenue)	Minor Arterial

Source: New York State Department of Transportation

On the south side of the Chadakoin River, the Study Area can be traversed by traveling in a west to east direction on Jones and Gifford Avenue, Fairmount Avenue, West 6th Street, Steel Street, Harrison Street and Allen Street. This southern route through the Study Area briefly crosses to the northern side of the Chadakoin River via the Fairmount Avenue Bridge and back to the southern side via the West 3rd Street Bridge. The route again crosses to the northern side and back to the southern side of the Chadakoin River via two bridges on Harrison Street. Each roadway segment and its NYSDOT Functional Classification are identified below (Table 19).

Table 19. Functional Classification of Roads Primarily South of the River

Street Name	NYSDOT Functional Classification
Jones and Gifford Avenue	Urban Minor Arterial
Fairmount Avenue	Urban Principal Arterial
West 6th Street	Urban Minor Arterial
Steele Street	Urban Collector
Harrison Street	Urban Minor Arterial and Urban Collector
Allen Street	Urban Collector

Source: New York State Department of Transportation

There are twelve routes that traverse the Study Area that are generally oriented in a perpendicular manner to the Chadakoin River. By their perpendicular nature, these routes have bridges, both large and small scale, which cross the Chadakoin River, the WNY&PA railroad, and (in some cases) additional roads (as previously described in the *Bridges and Bridge Abutments* section of this Report).

Of these twelve routes that traverse the Study Area, three routes include large scale, multi-span bridges and approaches that carry traffic over the Chadakoin River, the WNY&PA railroad and local streets, but do not provide a direct connection to

the waterfront. The term "flyover" is frequently used to describe structures of this nature. These three routes include:

- **Washington Street (NYS Route 60)** – The busiest transportation corridor in Chautauqua County links I-86 and I-90 to the north and Pennsylvania to the south and provides an important connection between the northern and southern portions of the City. This highway has the NYSDOT Functional Classification of Urban Principal Arterial.

- **West 6th Street (NYS Route 394)** – An important east-west transportation corridor in Jamestown that provides linkages to commercial developments in the Village of Lakewood and the western portion of the City. This highway has the NYSDOT Functional Classification of Urban Principal Arterial.

- **West 3rd Street (NYS Route 954K)** – An important east - west transportation corridor that links the eastern and western portions of the City together. This highway has the NYSDOT Functional Classification of Urban Minor Arterial.



(Left) A comparison of the footprints of the West 6th Street Bridge, (Center) West 3rd Street Bridge, (Right) and the Washington Street Bridge.

The remaining nine perpendicular secondary routes provide real access and connectivity between the east/west primary routes that run parallel to the River and the public spaces, residential, commercial and industrial properties that comprise the Study Area. These routes are a mixture of Urban Minor Arterials, Urban Major Collectors and Urban Local Streets. The bridges and approaches associated with these routes are smaller in scale and they offer opportunities for pedestrian circulation and formal and informal public waterfront access. These routes are summarized in Table 20 below:

Table 20. Secondary Routes Perpendicular to the Chadakoin River

Street(s)	NYSDOT Class	Zoning District(s)	Lanes	Signalized Intersections	Non-Signalized Intersections	Restrictions
Sprague Street	Urban Minor Arterial	LM	2-lane	Steele St.	Jefferson St.	* The Sprague St Bridge was recently replaced * Twin WNY&PA Railroad overpasses have an 11-foot vertical clearance
North & South Main Streets	Urban Minor Arterial	C3, C4, & HO	3-lane and parallel parking on both sides * turn lanes at some intersections	Harrison, East/West 2nd, East/West 3rd, and East/West 4th Streets	East/West 1st Streets	*North Main St descends at a steep grade between East/West 4th and the railroad * WNY&PA Railroad overpass has a 12-foot vertical clearance
Institute Street	Urban Local Street	M & C4	2-lane	none	NYS Route 60 Arterial, Victoria Ave, Briggs St, Yorkshire Alley & Harrison St	* Bisected by the WNY&PA Railroad - no through traffic
Foote Avenue	Urban Minor Arterial	C2, R2, & M	2-lane * turn lanes at some intersections	West 2nd St, Harrison St, & Allen St	Chandler St, Crane St, Briggs St, Water St, Victoria Ave, & Yorkshire Alley	* Foote Ave descends at a steep grade between East 2nd and Harrison Streets * WNY&PA Railroad overpass has a 11-foot vertical clearance
Winsor Street	Urban Minor Arterial	C2, CM, R2, & M	2-lane * turn lanes at some intersections	East 2nd St, Crescent St, & Harrison St	Scott St & Chandler St	* WNY&PA Railroad overpass has a 12-foot vertical clearance
Chandler Street	Urban Local Street	M	2-lane * turn lanes at some intersections	none	Winsor St, River St, & Allen St	* Road lanes are not striped (except at intersection with Winsor)
Buffalo Street	Urban Collector	M	2-lane * turn lanes at some intersections	5-way intersection of Buffalo, East 2nd, and Crescent Streets & Allen St	Blackstone Ave	* WNY&PA Railroad overpass has a 12-foot vertical clearance * 5-way intersection (at Buffalo, East 2nd, and Crescent) and skewed intersection (at Buffalo and Allen)
Hopkins Avenue	Urban Local Street	LM & M	2-lane	none	East 2nd St, Flagg Ave, Bigelow St, Minske St, & Tiffany Ave	* Large segments of Hopkins Avenue are brick roadway
Tiffany Avenue	Urban Local Street	M	2-lane * turn lanes at some intersections	East 2nd St & Allen St	Hopkins Ave, Blackstone Ave, & Buffalo St	* Signalized at-grade crossing for the WNY&PA Railroad * TitanX facility enclosed pedestrian bridge overpass

Source: New York State Department of Transportation, City of Jamestown, and GPI





(Left) Sprague Street was temporarily closed due to bridge replacement – It is now open totraffic. (Center) WNY&PA twin overpasses at Sprague Street. (Right) Steep grade at Main Street.





(Left) WNY&PA overpass at Main Street. (Center) Institute Street bisected by the WNY&PA Railroad – no through traffic. (Right) WNY&PA overpass at Foote Avenue.





(Left) Intersection of Chandler and Winsor Streets – WNY&PA overpass at Winsor Street. (Center) Non-striped lanes on Chandler Street. (Right)WNY&PA Railroad overpass at Buffalo Street.





(Left) 5-way intersection of Buffalo, East 2nd and Crescent Streets. (Center) Hopkins Avenue – Brick roadway. (Right) TitanX facility enclosed pedestrian bridge overpass and at-grade WNY&PA Railroad crossing along Tiffany Avenue.

PUBLIC TRANSIT

The Chautauqua Area Regional Transit System (CARTS) is the sole provider of low cost public transportation for any person living, working or visiting Chautauqua County. The system originated in the late 1970s as mostly a rural service. In 1997, CARTS took over the City of Jamestown's public (busing) transportation system and now maintains daily weekday service in Jamestown, Falconer, Celoron, Lakewood and other surrounding communities, including rural service into the Towns. CARTS is managed from their Jamestown offices and maintenance facility located on Hopkins Avenue. In total, there are 26 routes throughout the County, of which seven originate in downtown Jamestown and not only serve the immediate downtown area but the populated areas along its perimeter. Route runs begin at 6:00 a.m. and end by 4:30 p.m. There is no weekend service.

Funding for this service is primarily from two sources: 1) the New York State of Transportation, which distributes about $3.0 billion annually in Statewide Mass Transportation Operating Assistance (STOA), and 2) the Federal Transit Administration (FTA). Other lesser sources of revenue are from rider fares, local agencies and County funds.

CARTS historically has mostly served low income and disabled individuals, seniors, Jamestown Community College and Jamestown Business College students and others who have limited means of transportation to get them to and from work, shopping trips, and non-emergency medical appointments. CARTS also coordinates, schedules, supplies drivers and provides bus maintenance for the County's Veterans Bus Service and coordinates their services County-wide with the Department of the Ageing.

2011 records indicate a ridership total of 195,000 one-way trips county-wide, of which about 55,400 or 28 percent are attributed to trips made within Jamestown and the immediate surrounding area. While CARTS does mostly serve disabled individuals and seniors, yearly statistics show that ridership fluctuates with fuel prices. During calendar year, 2011 CARTS experienced a County-wide increase of approximately 11,000 riders over the previous year, of which approximately 20 percent were within the immediate Jamestown service area. This increase in ridership continued into the first six months of 2012.

RAILROADS

An active railroad traverses the City of Jamestown in an east–west direction. Jamestown railroad's earliest beginnings go back to the mid-1800s and, for the next 100 years railroads served as a primary transportation provider for both the public and for goods and services. As a result, the regional economy was centered on the railroads.

The primary east-west rail route was initially constructed and operated by the Atlantic and Great Western, which later became part of the Erie Railroad Company. The Erie Railroad was a major player across the southern half of New York State and into Pennsylvania, bringing the travelling public and bulk materials to Jamestown. The line was originally constructed at-grade, but in the late 1920s, the Erie Railroad Company elevated the railroad through the City to eliminate several at grade crossings within the City's core. From east to west, the intersections with Buffalo Street, Winsor Street, Foote Avenue, Main Street and Second Street were altered by this very large improvement project. The elimination of at-grade crossings significantly increased the level of safety as well as the convenience to the City's residents.

Records and maps show numerous areas within the City where single or multiple sidings were constructed to serve particular businesses. One particular area where numerous track sidings were found, and in some instances remain, is within the **Industrial Heritage Corridor** along River Street. Several of the buildings that still remain along River Street were constructed with loading docks for loading and unloading railroad cars. The River Street area still offers the potential of rail service. Within the **Chadakoin Outlet District**, rail sidings were also found along the rear of business fronting Jones and Gifford Avenue. This area also offers the potential for rail service.

Other areas that railroad sidings or rail yards were found were in the **Downtown District**, immediately west of Brooklyn Square, located at the ends of Cherry Street, Washington Street and Lafayette Street just north of the Chadakoin River; however these areas have been redeveloped for other purposes. Another former rail yard was located immediately west of Sprague Street along the north side of the Chadakoin River. This area remains largely vacant and is overgrown with brush.

Another benefit related to the new elevated railroad was the construction of the present and recently rehabilitated Erie Railroad Station located on West Second Street. The Erie Railroad Station is listed in the National Register of Historic Places (as previously described in the *Historic and Cultural Resources* section of this Report).

Today the railroad property through the City of Jamestown is owned by the Norfolk Southern Railroad Company, and its current leaseholder is the Western New York & Pennsylvania Railroad, LLC. The WNY&P main line extends from Hornell, New York westerly and southerly to Meadville, Pennsylvania. The WNY&P is always looking for new customers and is willing to work with business along the present route to expand their involvement in the community. Presently the current system is limited to freight (no passenger service). The WNY&P typically moves four to six trains per week through the City.

In 2013, the Western New York Railway Historical Society, Inc., in partnership with the City of Jamestown, applied for a TIGER V grant to bring passenger rail service back to the City of Jamestown, ultimately connecting the City with Buffalo/Niagara Falls. The project consisted of two components. The first was the development of a 14-car excursion train (including the assembling and upgrading of a streamliner passenger train) to promote tourism within the City of Jamestown. The second project component consisted of the rehabilitation of 15.9 miles of the New York & Lake Erie Railroad (NYLERR) between South Dayton and Waterboro, New York, a key component of the rail excursion train plan as it provides the shortest route available between Jamestown and Buffalo/Niagara Falls. Although the City was not awarded the grant, they plan to continue searching for funding to make this idea a reality.

Other key railroad infrastructure of interest is associated with the former Jamestown, Westfield & Northwestern R.R. Co. Railroad sidings and property for this privately owned company could be found as far east as the Harrison Street, Barrett Avenue, and Steele Street intersection. An iron through-truss railroad bridge which still exists today near Sprague Street spanned the Chadakoin River to allow for access to many of the businesses that once fronted Steele Street. The J.W. & N.W. Railroad also served many businesses along West Eight Street and Outlet Street. Today the bed for this former railroad is the location for the proposed *Phase V of the Riverwalk Trail* (aka the ***Chadakoin Park Bike Trail***).

An electric interurban railroad—Jamestown, Westfield and Northwestern Railroad (JW&NW)—connected the three towns of Jamestown, Mayville, and Westfield and ran along the north side of Chautauqua Lake. The JW&NW ended passenger operation in 1947, continued with freight, then quit entirely in 1950. Its rails and right-of-way have slowly disappeared.

PEDESTRIAN AND BICYCLE INFRASTRUCTURE

The City's existing sidewalk network within the Downtown is generally complete (sidewalks on both sides of the street) and in good condition. Beyond the Downtown, not all streets possess a complete sidewalk network, but generally the network is adequate for existing pedestrian demands. Sidewalk conditions beyond the Downtown vary greatly. Poor sidewalk conditions are an obstacle for pedestrians. The City's steep topography, especially within the Downtown Core on the north side of the River poses another serious obstacle for pedestrians. Improvements to the existing sidewalk network and other pedestrian amenities (such as curb ramps, cross walks, pedestrian timers, etc.) are outlined in the *Jamestown Bicycle and Pedestrian Plan*, the *Jamestown Riverfront Reclamation and Development Study, Addendum #1, 1991*, and the *City of Jamestown Traffic and Streetscape Enhancement Plan, September 2008*.

The City's existing bicycle network is nearly non-existent. With the exception of the signed New York State Bike Route 17, which travels along the shoulder (no designated bike lane) of NYS Route 394 and NY State Route 430, there are no other designated, signed, or striped bicycle lanes. Significant improvements to the existing bicycle network and other bicycle amenities (such as bike boxes and bike racks) are outlined in the *Jamestown Bicycle and Pedestrian Plan*.

One sidewalk and on-road bicycle network improvement project was recently funded. Chautauqua County was awarded a $965,200 Transportation Enhancement Program grant to complete bicycle and pedestrian improvements along 1.8 miles of County Road 67 (Jones and Gifford / Boulevard Avenue) from McCrea Point Park in the City of Jamestown to the Lucille Ball Memorial Park in the Village of Celoron. The project (known as the ***Lucy Trail***) will include restriping and signing the existing 5-foot wide paved shoulders of the road as designated bike lanes and installation of a 6-inch wide concrete curb and a 5-foot wide sidewalk along one side of the road. ADA accessible ramps and crosswalks will be utilized at all intersections. Based on preliminary engineering investigations of the proposed project, the concrete curb and sidewalk would be located along the south side of County Road 67; however, all options will be considered and analyzed during the detailed engineering design.

The City's off-road pedestrian trail network, known as the Chadakoin Riverwalk Trail, is a growing source of pride for the City. The *Jamestown Riverfront Reclamation and Development Study, Addendum #1, 1991* promoted the concept of a continuous Riverwalk and bicycle trail from Falconer to Celoron as a key component of the strategy to revitalize Jamestown's waterfront. The focus area of this study encompasses the City of Jamestown Waterfront Revitalization Area and beyond to the Village of Falconer. The development of a continuous trail was identified as a long-term goal, but the study recognized that such a trail cannot, nor

should be located on the riverbank in all areas. The study divided the waterfront area in to five discrete areas, each of which had proposed walking and bicycling trail alignments identified.

In the 1970's the first segment of the Chadakoin Riverwalk Trail was constructed along the south bank of the Chadakoin River from Main Street to the front side of the then Hills Department Store (now the Jamestown Area Medical Associates). That portion of the trail was reconstructed, improved and extended to Harrison Street in 2006 (*Phase I of the Riverwalk Trail*). In 2007, the Riverwalk Trail was extended along the southern bank of the River from Main Street to Washington Street and along the northern bank of the River from Main Street to slightly before the Warner Dam (*Phase II of the Riverwalk Trail*). Improvements were made to the Main Street Bridge and Keelboat Landing (a pocket park on the north bank of the River, east of Main Street) to encourage connection between the northern and southern portions of the Riverwalk Trail (also part of *Phase II of the Riverwalk Trail*). In 2011, the Riverwalk Trail was extended along the southern bank of the River from Washington Street to Panzarella Park and included a promenade under the newly built flyover Washington Street Bridge and a small amphitheater for public gatherings (*Phase III of the Riverwalk Trail*). In 2013, *Phase II of the Riverwalk Trail* was completed by extending the northern trail past the Warner Dam to Washington Street (it was held up due to permitting issues). Finally, in 2013, the Riverwalk Trail was extended several hundred feet to the west along the northern bank of the River from Washington Street (*Phase IV of the Riverwalk Trail*). The existing trail is paved and ADA-compliant, landscaped with trees and shrubs, includes benches, picnic tables, and trash receptacles, and is well illuminated. The trail is used by many residents for active transportation and recreational purposes. It provides scenic views of the River, opportunities for fishing, and a strong base to build upon as the Riverwalk Trail is extended in the future.

Two Riverwalk Trail extension projects have recently been funded. *Phase V of the Riverwalk Trail* (aka the ***Chadakoin Park Bike Trail***) has been funded, designed, and is awaiting final NYSDEC permit approval. Construction is anticipated to begin in Spring/Summer 2014. Funded by a $263,000 grant through the Department of State with funding under Title 11 of the NYS Environmental Protection Fund, the ***Chadakoin Park Bike Trail*** will connect Clifton Avenue to 8th Street near the Fairmount Avenue Bridge along the former Jamestown, Westfield and Northwestern Railroad right of way. The main portion of this segment will be 1.3 miles long and will consist of asphalt pavement. At points along the trail, there will be stone nature trails that will provide walkable access to the riverbank. Another feature is an observation tower that will be constructed atop an old building foundation. Both ends of the trail will be illuminated; however, the rest of trail will not be lit.

In December 2013, the City of Jamestown was awarded a $499,955 grant through the NYS Office of Parks, Recreation, and Historic Preservation within funding under the NYS Environmental Protection Fund to construct *Phase VI of the Riverwalk Trail*. Still in the preliminary design phase, this project includes:

- Improvements to Panzarella Park (resurface dock, improve pedestrian bridge)
- Construction of a connector trail from Riverwalk (east of the BPU) to Steele St
- Creation of a branded and signed trail network loop which utilizes (and where needed removes and replaces) the existing sidewalk network along Steele, Washington, West 2nd, Lafayette, West 3rd, and West 6th Streets
- Construction of a connector trail and scenic vista from the eastern base of the 3rd Street bridge along the eastern edge of an existing guiderail (which provides separation from the Railroad), under the West 6th Street bridge to Fairmount Avenue and the trailhead of the proposed ***Chadakoin Park Bike Trail*** and along Fairmount Avenue to McCrea Point Park
- Construction of a stair system at the West 6th Street bridge (site control will be granted by NYSDOT) to connect the sidewalk trail network loop with the connector trail discussed above
- Creation of two parks along Steele Street at the base of West 3rd Street and West 6th Street which include playground equipment, picnic table, trash cans, scenic vistas, and potentially fishing opportunities
- Creation of a scenic vista along Steele Street several hundred feet west of Sprague Street
- Construction of the ***McCrea Point Trail System*** which will meander throughout the park and includes a 30-foot pedestrian bridge and repairs and upgrades to the existing boat launch and pavilion
- Connection to the County's ***Lucy Trail*** project

Figure 19 depicts the existing Riverwalk Trail System (by Phase), portions of the proposed ***Lucy Trail*** and *Phase V of the Riverwalk Trail* (aka the ***Chadakoin Park Bike Trail***), and the preliminary Site Plan for the proposed *Phase VI of the Riverwalk Trail* in its entirety. Other proposed Riverwalk Trail extension projects not yet funded will be discussed in the *Proposed Projects* section of this Report.



(Left) Looking west along the Trail (south bank) from below the Washington St Bridge towards the BPU. (Center) Looking east along Trail (south bank) near JAMA. (Right) Looking east along the Trail (north bank) toward the Main St Bridge.

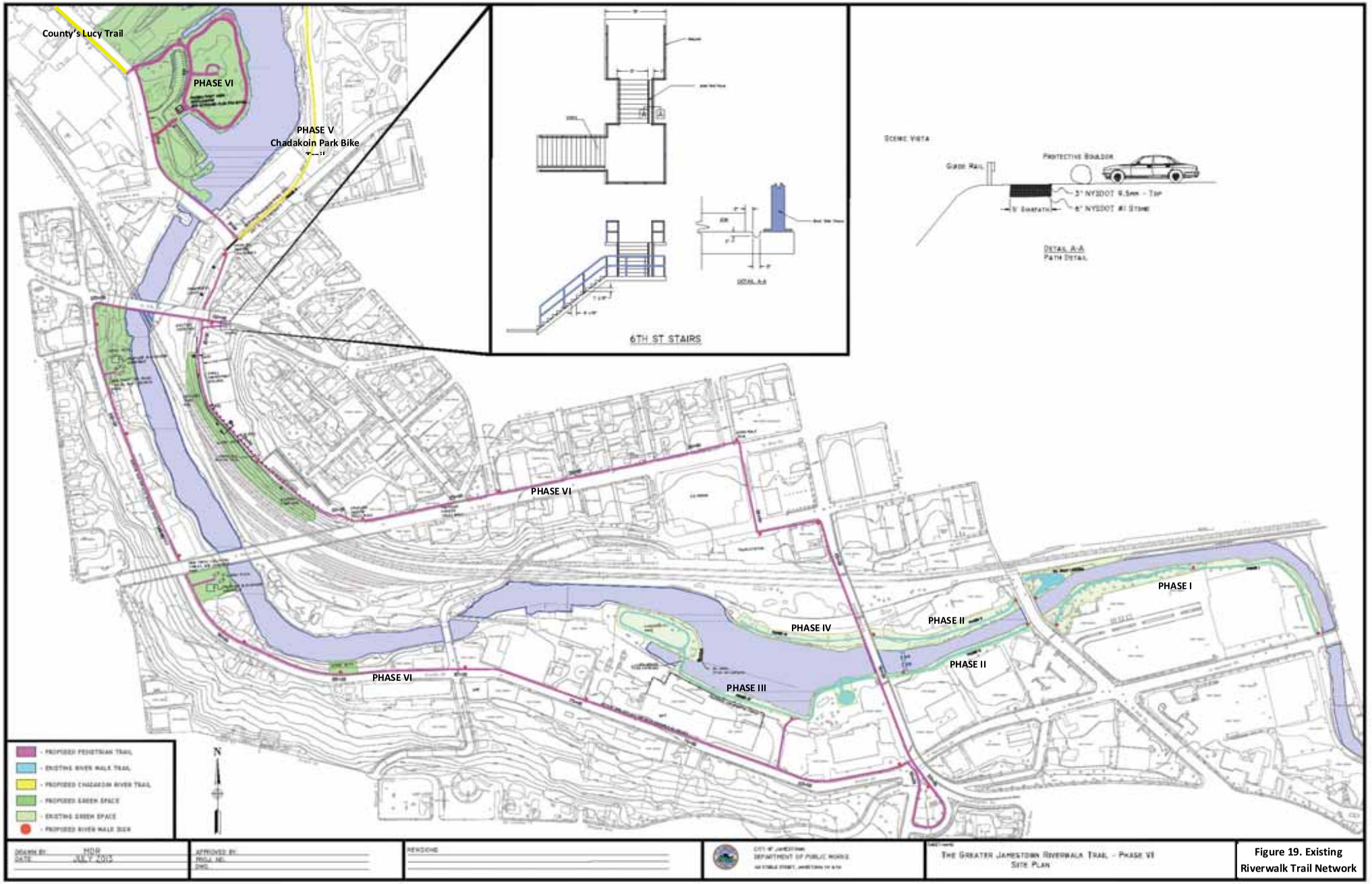


Figure 19. Existing Riverwalk Trail Network

PARKING

Business and community leaders and members of the public in the City of Jamestown have had long standing issues and concerns about parking. The City's geography and compact land development combine to make convenient parking a challenge in some areas of the City. As a result, the City has created focus groups, commissioned parking studies and made substantial investments in parking infrastructure, all of which have focused on the Central Business District and the West End developments.

- *Center City Project Parking Study by Saratoga Associates, July 31, 2000.* This study examined the City's parking needs in response to a proposed development in the west side of the central business district. The project was to include an ice arena, cinema, hotel, medical offices and a parking garage to be located in an area bounded by West 4th Street, Washington Street, West 2nd Street and Jefferson Street. Although some, but not all of the development scenarios envisioned were constructed, the study concluded that approximately 1,400 to 1,816 parking spaces would be required to serve the project area and an additional one-half block surrounding the project area.

- *Downtown Parking Discussion Group, February 12, 2002.* This focus group was composed of City and community leaders, economic development officials and members of the business community. The outcome of their discussions included the following recommendations:

    - Replacement of the then closed Cherry Street Parking Ramp at an estimated cost of $4,290,000, which would create an additional 280 parking spaces and satisfy commitments to local businesses.

    - Redevelop the Main Street Ramp at an estimated cost of $1,650,000, for a net gain of 149 metered and leased spaces that would help to reduce increasing parking pressure associated with West End developments and North Main Street parking needs.

    - Additional Surface Lots and On-Street Spaces would create an additional 322 spaces in the West End.

    - Additional surface lots parking in the vicinity of Baker Park would create 68 new long-term metered spaces, for an overall increase of 839 new parking spaces that were not previously available.

- *Comprehensive Parking Plan, Phase III by ALLPRO, January, 2007*. This study noted that Phase I of the City's Parking Plan had been completed by the

construction of the 296-space Cherry Street Ramp in 2006, which was a response to additional parking needs associated with the new ice arena and hotel projects. Between the North Main Street Ramp and the Cherry Street Ramp, a total of 416 off-street parking spaces and 254 metered spaces, for a total of 670 new spaces were added in connection with Phase I. ALLPRO's study noted that Jamestown now had a total of 1,957 municipal parking spaces, of which 892 were metered. Phase II of the Parking Plan centered on enforcement, where ALLPRO became responsible for collecting meter money and collecting fines for violations. Hand-held computerized ticket issuing equipment provided greater efficiency for enforcement personnel and better tracking of vehicles. Phase III of the Plan involved standardizing meters, restructuring parking rates and meter timing periods to best suit the available parking infrastructure and demand.

GPI's reconnaissance of the LWRP Study Area on July 23, 2012 indicated the presence of numerous public parking locations scattered throughout the downtown business area. The three public parking ramp structures located within the Study Area are attractive, well illuminated and generally well maintained (see Table 21). Metered off street parking facilities and designated leased spaces can also be found at numerous surface lots (see Table 21). Most of these surface lots are landscaped, well illuminated and generally well maintained; however, some are not well illuminated.

Table 21. Public Parking Ramps and Surface Lots

Location	Spaces	Users
Parking Ramps		
Cherry Street Ramp	280 leased & metered	Jamestown Ramada Inn, Jamestown Housing Authority, and other nearby buildings
Main Street Ramp	20 metered 51 leased 65 designated	Employees and patrons of downtown businesses 65 designated spaces are for employees of Jamestown's Post Journal
Spring Street Ramp	340 leased & metered	Employees and patrons of downtown businesses
Surface Lots		
West 3rd St & Clinton St	24	Long term off-street parking for West End businesses and attractions
West 4th St & Lafayette St	34	Long term off-street parking for West End businesses and attractions
East 3rd St near East 2nd St	37	Long term off-street parking for the central business district & the high school Note: ALLPRO has placed a sign that advertises the availability of leased spaces
East 4th St near Predergast Ave	30	Long term off-street parking for the central business district Note: ALLPRO has placed a sign that states all of the spaces have been leased
East 2nd St & Pine St	28	Convenient off-street parking for the central business district

Source: GPI

Metered parking is mostly found along the public streets within the core of the downtown. There are, however, many non-metered locations along Third Street from the Federal Building westerly to Washington Street. These parking spaces are mostly designated 15-minute to 2-hour locations and are for the convenience of patrons and customers to business and public buildings fronting Third Street.

Unfortunately all of the public parking locations described thus far are north of the elevated railroad and due to the characteristically steep slopes of the north/south downtown streets, not one of the mentioned locations (other than the Main Street Parking Ramp) is convenient for immediate access to the Chadakoin Riverwalk Trail or the waterfront.

South of the railroad the terrain becomes relatively flat, theoretically making it much easier to place public parking within accessible distance of the Riverwalk Trail and waterfront. A public parking lot exists on the south side of the River behind the Board of Public Utilities Offices on Steele Street and provides convenient access to Panzarella Park, the Riverwalk Trail, and the waterfront. Additionally, a gravel un-lined public parking area exists at McCrea Point Park and is large enough to serve existing park/boat launch users and future ***Chadakoin Park Bike Trail*** users (McCrea Point Park and its parking advantages is one of the few locations throughout the City that allows unobstructed access to the River). Lastly, a small gravel public pull-off parking area owned by the City along Allen Street provides limited access to the River. In order to provide additional and better parking options may require partnerships between the City and private property owners.

For example, within the immediate proximity of North Main Street, Harrison Street and the River is a historic section of the City known as “Brooklyn Square”, which today is comprised of several drug stores, restaurants, the Jamestown Area Medical Associates (aka the Riverside Medical Center), a bank, and a moving and storage business. Adjacent to these businesses along Harrison Street is a small plaza and a retail sporting goods business. Each of these locations (particularly JAMA, the CVS drug store, Friendly’s Restaurant, and the Plaza on the south side of Harrison Street) have extremely large parking areas that were likely constructed because of zoning requirements. In most instances these private parking lots are underutilized and overly constructed. The City could potentially create partnerships with the landowners and enter into access and parking agreements to provide additional public parking for access to the Riverwalk Trail and the waterfront.

Beyond the “Brooklyn Square” area, one moderately sized parking lot located at the southwest corner of Harrison Street and Foote Avenue and a much larger parking lot located at the northeast corner of Harrison Street and Foote Avenue are located near the Chadakoin River. These lots, however, are both owned by Chautauqua County and are designated for use by their tenants in the Riverside Industrial

Center. Other privately owned parking locations found along and near the River as it traverses through the City include: a large unused parking lot on Blackstone Avenue (opposite the Blackstone Business Company and east of the Dahlstrom Complex) and underutilized parking lots located at the intersection of Chandler Street and River Street and near the intersection of Tiffany Avenue and Hopkins Avenue. These privately owned lots could provide pedestrian and vehicular access to the River for recreational opportunities. The City would need to create partnerships with the owners and enter into access and parking agreements.



Current parking area at McCrea Point

2.7 WATER QUALITY

As previously discussed in Section 2.3 Surface Waters and Surface Water Uses, surface waters in the Jamestown LWRP include the Chadakoin River, a classified tributary, and numerous non-classified water bodies. The Chadakoin River and the classified tributary are classified by the NYSDEC as a Class C stream, which identifies its best usage as supporting fisheries and suitable for non-contact activities.

The number and extent of studies to evaluate the quality of the water in the Chadakoin River are limited. However, these studies have found that the quality of the River is impaired and continues to be threatened. These threats to water quality include non-point source pollution stemming mainly from urban runoff via roadways, parking lots, and other impervious areas. Threats also include point sources such as waterfront brownfields and historically developed industrial facilities through which groundwater flows, picking up contaminants in areas in which filling or spills occurred, and discharging these contaminants into the River dissolved within the groundwater.

An NYSDEC water quality assessment based on resident macroinvertebrates were performed on the Chadakoin River in Jamestown in three locations in 1995 and two locations in Falconer from 1989 to 2002. All three sampling locations in Jamestown were listed as moderately impacted with elevated levels of metals and Polycyclic Aromatic Hydrocarbons (PAHs) identified in river sediments and invertebrate tissues.

The Chadakoin also appears on the Draft 2012 Section 303(d) List of Impaired Waters Requiring a Total Maximum Daily Load (TMDL)/Other Strategy based on phosphorus from municipal/industrial urban runoff and aquatic toxicity from agriculture.

The Ecological Conditions and Living Infrastructure Framework document in Supporting Document 2 discusses conditions in the River in more detail.

2.8 NATURAL RESOURCES

Natural Resources were characterized and evaluated during the performance of this LWRP, and the Ecological Conditions and Living Infrastructure Framework document in Supporting Document 2 discusses conditions in the River in more detail. As noted in this document and illustrated in Figure 21, despite the City's rich industrial heritage, the Chadakoin River contains some incredible natural resources.

WETLANDS

The rich natural resources, notably the very large, high quality wetlands, of the LWRP Study Area pose an excellent opportunity to foster ecological revitalization (Figure 21). Two portions of the LWRP Study Area are classified wetlands and are under both federal (U.S. Army Corps of Engineers) and state (NYSDEC) jurisdiction. Both of these wetlands are located within the **Chadakoin Outlet District**. The largest wetland (LW-10) encompasses 308.6 acres and is located on the right bank of the Chadakoin from the Chautauqua Lake outlet downstream to approximately McCrea Point and is bordered to the south by Jones and Gifford Avenue. This wetland is classified as "Class I", which is the highest rank in New York State's four class ranking system. The U.S. Fish and Wild Service identifies the wetland as palustrine, freshwater forested/shrub wetland, broadleaved deciduous, that is seasonally flooded/saturated.

Field assessments reveal the wetland is palustrine in nature and classifiable as a deciduous hardwood swamp with a tree canopy dominated by silver maple, black willow, elm species, and ash species and an understory dominated by highbush

blueberry, winterberry, royal fern, sensitive fern, and skunk cabbage. Minimal instances of invasive plant species were found and only included a small patch of Japanese knotweed and the random barberry and multiflora rose along the Chadakoin itself where there was an opening in the canopy. Wildlife observed included frogs, mallards, and an osprey with its prey.

The second and smaller wetland (LW-4) is straddled between the Chadakoin River and Chadakoin Park. This 41.5-acre wetland is also classified as "Class I." Field assessments reveal the canopy species within the park, rail trail corridor and marsh complex include willows, spruce, maples, walnuts (in wetter areas), catalpa, oaks, elms, and several groves of aspen scattered across the open space. Understory and open field species observed include redtwig dogwood, viburnum, sumac, equisetum, sedges, juncus, alder, phlox, Virginia creeper, riverbank grape, and milkweed. Skunk cabbage and ferns inhabit the spaces nearer the wetland fringe of the River on the western edge and a small grouping of sagitaria inhabits the canal.

These wetlands are protected by NYSDEC and USACE wetland regulations and serve an important role in absorbing and holding floodwaters from downstream populated areas as well as providing fish and wildlife habitat.

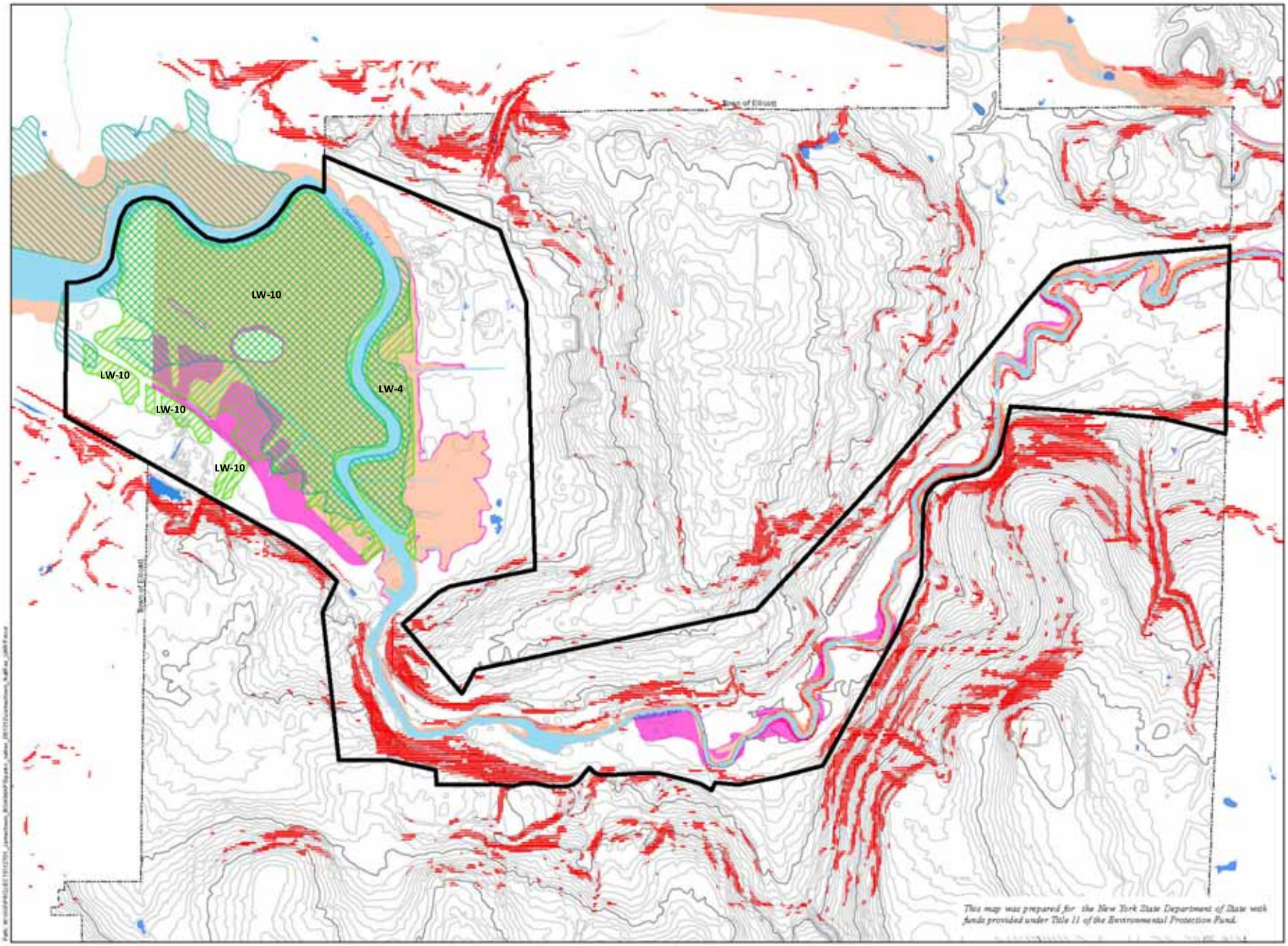
FISH AND WILDLIFE

The following sections discuss the diversity of fish and wildlife found within the Jamestown Waterfront Revitalization Area. Additional discussion is included in the Ecological Conditions and Living Infrastructure Framework in Supporting Document 2.

FISH

Recent fisheries reports for the Chadakoin River are not available; however, it can be assumed that common species in Chautauqua Lake would also be present in the downstream Chadakoin River (which has a very similar habitat to the Lake in areas upstream from the Warner Dam). Chautauqua Lake is noted as supporting a coolwater fishery since it contains a mix of both warmwater (e.g. bass and sunfish) and coolwater species (e.g. walleye and yellow perch). Walleye and muskellunge are both stocked annually to support an active recreational fishery in the Lake.

During the field assessment of the River corridor, fishermen above and below the Warner Dam reported commonly catching walleye and smallmouth bass from the stream. One fisherman angling under the Fairmount Avenue Bridge proudly displayed a bucket containing a combination of crappie and bluegill. A single



Biohabitats

CITY OF JAMESTOWN

LOCAL WATERFRONT REVITALIZATION PROGRAM

NATURAL RESOURCES

- LWRP Study Area
- River
- Freshwater Pond
- State Mapped Wetlands
- Federal Mapped Wetlands
- FEMA 100 Year Floodplain
- FEMA 500 Year Floodplain
- 5 ft contour
- 50 ft contour
- >20% Slope

Note: Locally significant fish and wildlife habitats include all areas depicted as the "River" and as "State and Federal Mapped Wetlands"

Sources
1. City of Jamestown Local Waterfront Revitalization Program Work Plan Map - Edited by LaBella to reflect steering committee revisions
2. Surface Water layer provided by Chautauqua County
3. Federal Wetlands layer provided by National Wetland Survey - US Fish & Wildlife Service
4. State Wetlands layer provided by CUGIR
5. FEMA Floodzone layers provided by NYS GIS Clearinghouse
6. Contour data generated by Bergmann Associates
7. Slope data generated by Biohabitats using contour data as source

N

0 1,000 Feet

1:16,000

Labella Project No: 212251

Figure 20. Natural Resources Map

longnose gar was observed cruising the shallows near Panzarella Park and common carp and white sucker were observed in the River near Harrison Street. While no other fish data is available for the Study Area; it is likely that the River also supports a number of non-game fish including, other suckers such as redhorse, or the northern hogsucker as well as chubs, dace, and other minnows.

Strong, turbulent flow at the outlet of the Warner Dam appears to preclude upstream fish passage at this structure. Downstream beyond the Warner Dam there is one barrier to local fish passage and migration at the Dahlstrom Dam, near Buffalo Street and another potential blockage below the Dow Street bridge in Falconer. The elevation drop across the Dahlstrom Dam is approximately four feet, while the potential obstruction near Dow Street is a low head structure that may only act as a fish barrier during low flow conditions. Given these barriers, fish passage is limited to only downstream passage in the area between the Warner and Dahlstrom Dams. These structures prevent two-way passage for fish that reside in the Chadakoin (and other streams in the larger Conewango Creek watershed) and Chautauqua Lake.

Related to fish passage are the migration and proliferation of freshwater mussels. Freshwater mussels have been identified by the United States Fish and Wildlife Service as being the most endangered group of organisms in North America as they are highly sensitive to channelization, sedimentation and hydromodification. Their unique life cycle requires a fish host to transport mussel larvae (glochidia) to new stream reaches, ensuring that mussel populations are continually transported to upstream areas. The Allegheny River and portions of the watershed are known to support globally significant populations of federally endangered freshwater mussels. Sixteen species of mussels, including one endangered species, were identified in Conewango Creek in 2005 (Pennsylvania Fish and Boat Commission, 2005). It is conceivable that these species could repopulate the Chadakoin if migration barriers are removed.

WILDLIFE

The City of Jamestown Waterfront Revitalization Area does not contain Chautauqua Lake, but its proximity to the Lake suggests that much of the wildlife found in and around the Lake can also be found in the Study Area.

Chautauqua Lake has been designated as a State Important Bird Area by a consortium of conservation and nature organizations, including the National Audubon Society of New York, as a major stopover for migration of waterfowl along the Atlantic Flyway. This site falls within the Lower Great Lakes/St. Lawrence Plain

Bird Conservation Region and includes the State-owned 16 mile-long Chautauqua Lake. More than 270 species of birds have been documented over the past 20 years. Additionally, the site has typically supported over 1% of the estimated State wintering population of pied-billed grebes. The site is also listed in the 2002 New York State Open Space Conservation Plan as a priority site under the project name Chautauqua Lake Access, Shore Lands, and Vistas.

The Lake and surrounding area also have a number of wildlife management areas including *Tom's Point*, *Stow Farm*, *Cheney Farm*, *Dobbins Woods*, *Elm Flats Wetland Preserve*, *Hartson Swamp*, and *Clay Pond*. There are also a number of significant natural resources further afield, providing habitat patches within the region, and which may provide further reference for the ecological diversity and the value of improved habitat along the Chadakoin River. In general, the Chadakoin River Watershed is within the Cattaraugus Highlands ecological zone, which is dominated by northern hardwoods (primarily oaks) and supports a variety of mammals, birds, reptiles, and amphibians, many of which may be found within the Study Area.

The Chadakoin River plays a significant role in habitat connectivity between the Lake, many of the wildlife management areas, and several other natural resources further afield. The quality of the River and the health of its riparian habitat can drastically impact the regional wildlife's ability to safely travel to find food, reproduce, and migrate.

Within the wetland complexes of the **Chadakoin Outlet District**, in general, the shorelines are gentle sloping, thus exposing them to seasonal and episodic inundation. These inundations, sheer size, and limited human encroachment and visitation make these wetlands important areas for amphibians and birds. In addition, the nature of the river and shoreline interaction lends itself to large concentrations of submerged and floating aquatic vegetation, also ideal habitat for resident fish species. During field assessments, wildlife observed within the wetland complexes included frogs, mallards, and an osprey with its prey.

Wildlife habitats within the **Downtown District**, **Industrial Heritage Corridor**, and **East End Industrial Corridor** are limited due to the highly urbanized nature of the sub-areas combined with the many "armored" and high walled shorelines along the River. There are a few points where the natural shoreline still exists within these sub-areas including, but not limited to, areas behind the Gateway Center and areas east of Bigelow Avenue.

Additional discussion is included in the Ecological Conditions and Living Infrastructure Framework document in Supporting Document 2.

PROTECTED ANIMALS AND PLANT SPECIES

Protected animal and plant species are located within the LWRP Study Area. Records from the New York State Natural Heritage Program reveal that one species of State Special Concern, the Eastern spiny softshell turtle, was found in the City of Jamestown Waterfront Revitalization Area. During fieldwork, evidence of turtle nesting grounds was found in several of the canals which empty into the Chadakoin River within the **Chadakoin Outlet District**. Additionally, a female Eastern spiny softshell turtle was observed near the Riverwalk Center along the Riverwalk Trail laying eggs in a landscaped mulch area within the **Downtown District**. Turtle nesting is evidence for the need of integrated green infrastructure within a riparian treatment zone in key locations along the Chadakoin. Several additional turtles were observed on the downstream end of the Warner Dam and further downstream in the Chadakoin River (within the **Downtown District**). Anecdotal accounts from employees at the Gateway Center describe how several turtles were observed behind the Gateway Center trying to nest in the asphalt upland of the river. Throughout much of the LWRP Study Area, especially downstream of the Warner Dam where the River approaches the downtown and industrial environments, shoreline and buffer access is fairly limited, thus turtles are forced to nest in less than ideal locations or congregate in areas with easier floodplain access although nesting substrate may not be ideal.

In addition, historical records found through the New York State Department of Environmental Conservation's Environmental Mapper website suggest that a New York State Endangered plant, Burdick's wild leek, was identified in the wetland complexes which encompass the bulk of the **Chadakoin Outlet District**. Burdick's wild leek is known only to occur in Chautauqua County and any harvesting or removal is prohibited.

The US Fish and Wildlife Service maintains information regarding occurrences of Federally listed or proposed threatened and endangered species. Species lists are available at a County-wide scale: species lists for a smaller scale (such as the City of Jamestown or the LWRP Study Area) are not available. The Chautauqua County Federally listed endangered and threatened species list suggests the Clubshell and Rayed bean (both species of mussel that are Federally endangered) are known or are likely to occur in the County, and may or may not occur within the Chadakoin River. Further study would be required to determine if these species are present in the River.

LOCAL SIGNIFICANT FISH AND WILDLIFE HABITAT

Jamestown does not possess any State-designated Significant Coastal Fish and Wildlife Habitats; however there are many areas of the City that are locally significant. Locally significant fish and wildlife habitats include the River, several man-made canals, and all State and Federal wetlands as depicted in Figure 20.

2.9 TOPOGRAPHY, GEOLOGY AND SOILS

Located in the Appalachian Uplands physiographic province, the LWRP Study Area is composed of siltstone and shale with numerous exposed areas of bedrock. The Chadakoin River at the Chautauqua Lake outlet is kept broad and shallow by this bedrock.

The ***upland*** topography of the LWRP Study Area varies by sub-area (Figure 20). The **Chadakoin Outlet District** is relatively flat with steep upwards slopes just to the south of the southern boundary (railroad) and north of Fluvanna Avenue. Within the **Downtown District** most areas contain steep upward slopes away from the River. The only relatively flat areas are located between the south side of the River and Steele/Washington/Harrison Streets and between the BPU Electrical Generation facility and Winsor Avenue. The **Industrial Heritage Corridor** is also mainly composed of steep upward slopes away from the River with the only relatively flat land located on the north side of the River in the vicinity of River Street. Finally, the **East End Industrial Corridor** is relatively flat except along its southern boundary (Buffalo Street). The topography of the River and its immediate vicinity is also discussed in the Flooding and Erosion section of this report.

Five major soils are identified within the Study Area based on the USDA NRCS Web Soil Survey. The **Chadakoin Outlet District** is dominated by *Carlisle muck* in wetlands LW-10 and *Udorthents* (landfill) in the area of Chadakoin Park. The unstable *Carlisle muck* soil type makes any sort of substantial development extremely difficult and expensive while the *Udorthents* (landfill) soil type, because of the unknown fill components and potential for contaminants, could potentially influence ecological restoration and/or green infrastructure initiatives if excavation is required.

Soil types in the **Downtown District** are composed almost entirely of *urban land*. The **Industrial Heritage Corridor** is composed primarily of *urban land* and two types of *Chenango gravelly loam*. Finally, the **East End Industrial Corridor** includes one type of *Chenango gravelly loam* with a small ribbon of *Hamlin silt loam* along the Chadakoin River. These soil types are typically well drained as they were formed in morainic glacial till and gravelly outwash deposits.

2.10 FLOODING AND EROSION

The following sections describe flooding and erosion potential within the LWRP Study Area.

FLOODING, FLOOD PLAINS, AND SHORELINE TOPOGRAPHY

A long history of varying industrial uses on the Chadakoin River have led to some dramatic changes in the nearby River topography and associated drainage (Figure 20). Overall, within the **Chadakoin Outlet District**, the shoreline is relatively flat leading to the River. As a result, large sections of the sub-area are federal and state classified wetlands. These wetlands are protected by NYSDEC and USACE wetland regulations and serve an important role in absorbing and holding floodwaters from downstream populated areas. These wetland complexes represent the majority of accessible floodplain areas within the City of Jamestown as a large portion of the Chadakoin downstream of McCrea Point has been channelized by retaining walls, rip-rap, bulkheads, and building foundations.

As the Chadakoin River passes McCrea Point it begins to change from a broad, wide river and floodplain, to a narrower river and corridor until it reaches Sprague Street. Historically the Chadakoin then entered a much broader floodplain extending the length of the Study Area, but industrial and commercial activities have essentially cut-off the Chadakoin from much of its floodplain. Only in small narrow stretches throughout the **Downtown District**, **Industrial Heritage Corridor**, and **East End Industrial Corridor** does the River have access to narrow floodplains, with the majority of these areas concentrated in the **East End Industrial Corridor**. Throughout most of these three easternmost sub-areas various retaining walls, bulkheads, and buildings now form extensive stretches of riverbanks, thus removing traditional floodplain-river interaction. On the north side of the Chadakoin River, the Western NY and PA Railroad bed has also changed the topography of the corridor and created a physical barrier to the River.

Despite the removal of traditional floodplain access downstream of McCrea Point, flooding has been mostly eliminated by means of regulating water levels via the Warner Dam, the large upstream wetlands complex, and the building of river walls throughout large stretches of the river corridor. Most areas located within the 100-year flood plain are currently undeveloped. Most areas located within the 500-year flood plain are also undeveloped; however, the Jamestown Area Medical Associates, portions of the Gateway Center, and portions of the Weber Knapp complex are all located within the 500-year flood plain.

NATURAL PROTECTIVE FEATURES AND EROSION

As discussed previously, the banks of the Chadakoin in the **Chadakoin Outlet District** are lined by wetlands that act as natural protective features. However, the banks of the remainder of the River throughout the Study Area are occupied by various man-made structures including retaining walls, bulkheads, and buildings, thus eliminating traditional floodplain-river interaction. A number of these structures are in disrepair and present significant erosion hazards through potential failure. Several retaining walls were observed that had been undermined and leaning into the River.

Notable examples of areas in which erosion is occurring include:

- Eroding, mown banks within McCrea Point Park
- Discrete areas of Riverbank along Harrison, Allen, Buffalo, and Blackstone Streets
- The vacant area west of Blackstone Fabrication
- The shoreline between the Riverwalk and the Chadakoin River, just downstream of Panzarella Park

As discussed in the *Proposed Projects* section of this Report as well as in the Ecological Conditions and Living Infrastructure Framework document in Supporting Document 2, the development of a living infrastructure framework will help to prevent future erosion issues throughout the City.

2.11 SUMMARY AND DISCUSSION

The following summarizes the inventory presented above, discusses constraints to development, and identifies key opportunities for revitalization.

Community Characteristics

- The Jamestown Waterfront Revitalization Area has a rich industrial history.
- The City of Jamestown's population is 31,134 (2010 Census) and the population has significantly decreased over the past 60 years, although the rate of decrease has slowed.
- The population within the Study Area has relatively low income and educational attainment coupled with high unemployment.
- The population's economic conditions limit its spending power, reducing the potential for growth.

Economic Context

- Health care and social services provide a large portion of jobs within the City

- Manufacturing, while diminished since the middle of the 20th Century, makes a very significant contribution to employment in the City.
- Tourism plays a limited role in the employment base of the City, although opportunities exist to increase opportunities for residents and visitors.
- Economic analysis has identified the following potential areas of growth:
    - New or adaptive re-use housing units
    - Medical/social service office space
    - Professional office space
    - Restaurant/café/bar space
    - Industrial, light industrial and high tech potential
    - An additional limited service hotel
- Primary opportunities include:
    - Enhance use of/connections to River/natural resources
        - Value = Location, Location, Connections
        - Extend the experience (Dr's visit and lunch or River-related recreation)
        - Bike path connections Lake/McCrea Point/Downtown
        - Riverwalk to reinforce healthcare/wellness corridor
        - Riverwalk to link healthcare node to commercial nodes @ Brooklyn Square and Downtown
    - Capture Opportunities in City Center
        - Downtown
            - Expand eating/drinking offerings
            - Adaptive re-use of existing buildings for residential/office
            - Additional connections from Downtown to River
        - Medical Corridor
            - Assemble key sites for private development that support Medical Corridor
            - Use Riverwalk and streetscape to define the Medical Corridor
        - Consider Riverfront locations between Main and Washington for future hotel development
    - Support continued industrial use of eastern portion of City
    - Complete fiber optic loop
    - Maintain/preserve rail
    - Consider linkages between existing manufacturers in the Study Area and JCC's "Dream It-Do It" training program
    - Complete the demolition/remediation of Dahlstrom site

Land Use and Zoning

- The Study Area has been broken into four subareas based on land use and other characteristics:
    - **Chadakoin Outlet District** – Consists of large wetlands and parks as well as significant commercial development and some industrial development
    - **Downtown District** – Contains myriad uses and includes a mixture of residential, commercial, light manufacturing, and vacant uses.
    - **Industrial Heritage Corridor** – Primarily contains a mixture of commercial, residential, and vacant (former industrial) properties.
    - **East End Industrial Area** - Consists of manufacturing facilities that are more modern and fully utilized with some vacant properties and limited residential uses.
- The zoning code was last updated in 1998 and consists of 11 zoning districts including various residential, commercial, manufacturing, and land conservation districts and one historic overlay district.
- In addition to the zoning code, Urban Design Guidelines were prepared in 2006 for five areas of the City, which include a portion of the **Downtown District**.
- Over 50 percent of the Waterfront Revitalization Area is publicly owned, and much of that is concentrated in the parks and wetlands in the **Chadakoin Outlet District**.

Brownfield, Vacant, and Underutilized Sites

- The Waterfront Revitalization Area includes 65 sites categorized as brownfield, underutilized and vacant sites.
- The 65 sites occupy approximately 250 acres and are assessed at almost $15.2 million

Water-Dependent and Water–Enhanced Uses

- Despite its location along the Chadakoin River, the Waterfront Revitalization Area contains only a limited number of water-dependent and water-enhanced uses.
- Significant opportunities exist to expand water-related uses throughout the Waterfront Revitalization Area.

Infrastructure

- The City's utility and transportation infrastructure was designed to support a larger population and more commercial and industrial users.
- The infrastructure is in relatively good shape and has excess capacity.

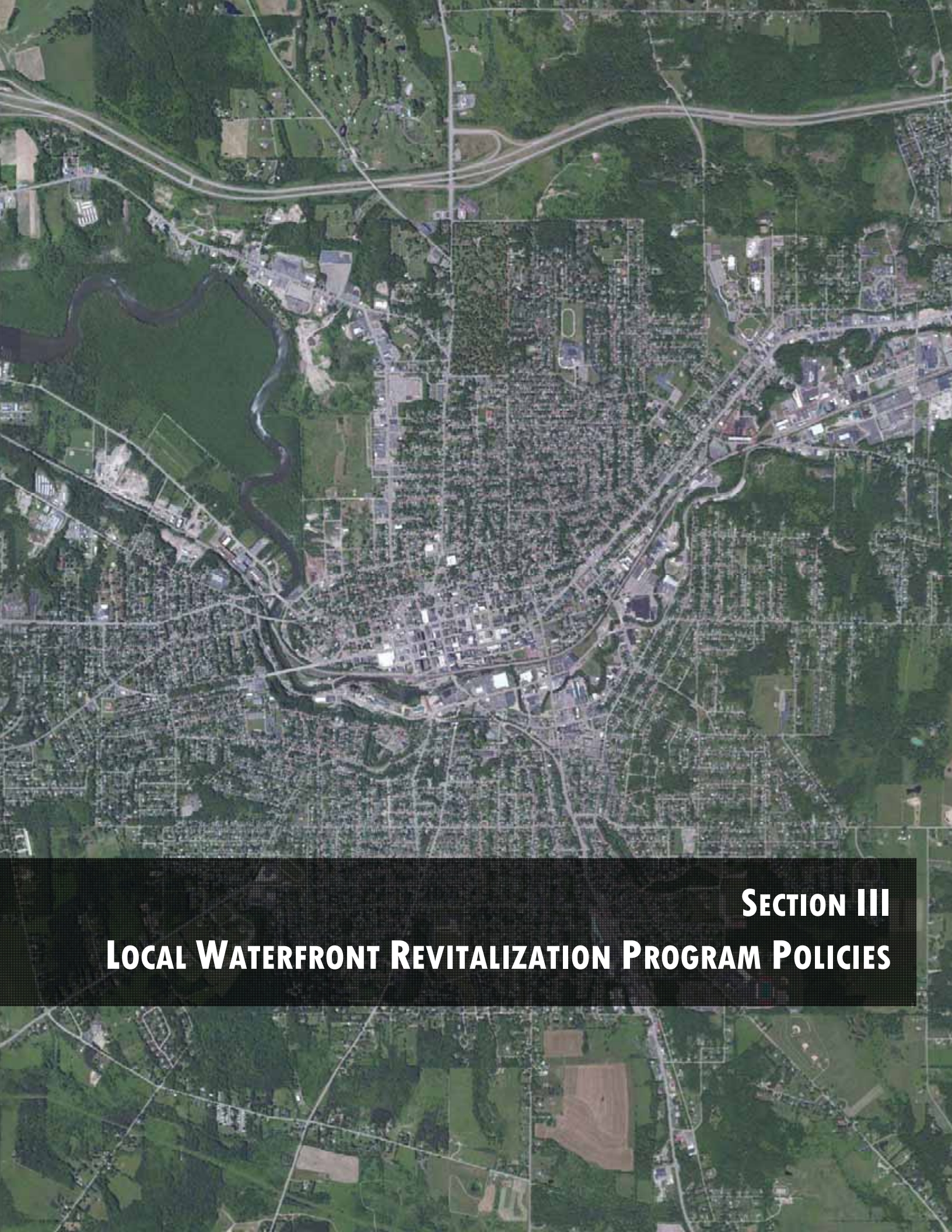
- The low-cost power and district heat provided by the BPU present opportunities to foster new development.
- The River and railroad, elevated in some places, require the use of bridges and underpasses, making pedestrian access and traffic flow challenging in places.
- Ample parking exists within the **Downtown District** north of the River, although public parking south of the River and in the other subareas is limited and will need to be expanded to facilitate access to the waterfront.

Environmental and Ecological Considerations

- Wetland and River protection
    - The wetland complex in the **Chadakoin Outlet District** is of high quality and occupies over 350 acres
    - Concerns at the wetlands include:
        - Encroachment by development
        - Invasive species management
    - Opportunities for wetland restoration exist throughout the Waterfront Revitalization Area
- A riparian treatment zone does not exist within large portions of the Study Area. A riparian treatment should be created along key portions of the River to protect habitat, improve water quality, and provide additional opportunities for residents to take advantage of the River.
- The presence of the Spiny Softshell Turtle, a Species of Special Concern, presents opportunities to increase habitat and nesting areas and an enhanced riparian treatment zone along key portions of the Chadakoin.
- Fishing in the River has become more popular as the quality and amount of access to the River has improved.
- Floating garbage accumulates above the Warner Dam and is later flushed down the River when the flood gates are opened.
- The quality and extent of aquatic habitat could be improved through the creation of living shorelines
- The incorporation of fishing friendly structures could be made to existing bulkheads.
- Water quality within the River is listed as moderately impacted with metals and other contaminants. Opportunities exist to improve water quality, including:
    - The use of green infrastructure to mitigate stormwater impacts.
    - Improved management of stormwater from existing development along the River.
    - Working with businesses with potential significant impacts, such as scrap yards and automobile repair facilities, to reduce impacts.

Public Access, Trails and Recreation

- Access to the River within the Waterfront Revitalization Area is limited in some areas due to ownership, topography, and development.
- Access to the River is provided via formal (parks and waterfront trails) and informal (walking paths through vacant properties) trails.
- Opportunities exist to extend the waterfront trail network, although the presence of the railroad, the BPU, and other developments make a continuous trail immediately adjacent to the River impossible.
- Plans exist to extend the waterfront trail along the edge of the wetlands complex (*Phase V of the Riverwalk Trail* aka the ***Chadakoin Park Bike Trail***), which will provide excellent opportunities to increase the ability of residents and visitors to appreciate the city's natural resources.
- Plans exist to extend Riverwalk (*Phase VI of the Riverwalk Trail*) in a continuous loop, connecting Downtown to McCrea Point Park, Chadakoin Park, and beyond.
- Additional efforts should be made to extend the trail network into neighborhoods and greenspace areas to better connect the City of Jamestown's residents with the Downtown and with recreational opportunities.
- The Medical Corridor concept is taking shape in Jamestown, and the creation of a pedestrian trail from the River, using the existing Riverwalk as a starting point, to the hospital would create an important linkage between two of the most important health care facilities in the City (the Riverside Medical Center and the WCA Hospital).



Section III
Local Waterfront Revitalization Program Policies

SECTION III – LOCAL WATERFRONT REVITALIZATION PROGRAM POLICIES

The focal point of the LWRP planning process is the adaptation of the State-established waterfront policies by the local communities to meet specific goals. This allows the communities to identify their own waterfront issues and utilize local approaches to address them while maintaining relative consistency with State guidance. Therefore, the following policies for the City of Jamestown are consistent with those established by the State, yet they are specifically tailored to the needs and characteristics of the Chadakoin Riverfront.

This section presents the waterfront revitalization policies and their associated standards that are to be used in guiding appropriate development and actions for the Chadakoin Riverfront and associated Jamestown Waterfront Revitalization Area as defined earlier. They consider the economic, environmental, and cultural characteristics of Jamestown. The policies are comprehensive, and reflect existing laws and authority regarding development and environmental protection. Taken together, these policies and their associated standards are used to determine the appropriate balance between economic development and preservation that will permit beneficial use of and prevent adverse effects on Jamestown's riverfront resources.

3.1 DEVELOPED WATERFRONT POLICIES

POLICY 1:

Foster a pattern of development within the City of Jamestown's Waterfront Revitalization Area that enhances community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a waterfront location, and minimizes adverse effects of development.

The community character of Jamestown is defined by a pattern of urban development with a strong physical relationship to Chautauqua Lake and the Chadakoin River. The River basically follows a west to east orientation as it meanders through the City. The development patterns fall in four primary groups (defined in Section I of this document) along the River from west to east:

- Chadakoin Outlet District – Wetland areas are the prevailing land use. Also included are former industrial sites, residential and commercial.
- Downtown District – This is the central business district and has land uses that include business, service and commercial uses.
- Industrial Heritage Corridor – This area contains some active, heavy industrial uses mixed with former industrial lands along the River in this area.

Residential properties are found on the hillsides along the edges of the corridor.

- East End Industrial Corridor – This area includes many modern manufacturing facilities which are currently underutilized or fully active. Industrial lot sizes are generally larger than in the Industrial Heritage Corridor. Along the outer edges of this corridor uses include residential and some commercial.

The longstanding planning goal for the riverfront area of the City has been to reclaim and rehabilitate the riverfront area and revitalize this section of the City through economic redevelopment, increased recreational opportunities and establishment of community-oriented social activities and the facilities to accommodate them.

This policy is intended to foster a development pattern that provides for beneficial use of the riverfront resources of the City of Jamestown. The primary components of the desired development pattern are to:

- Encourage increased contact with the water through further extension of the Riverwalk Trail and other amenities to provide public access and exposure to the River while enhancing and preserving the ecological function of the River and associated floodplain
- Reuse existing, architecturally significant building stock and historically/ culturally significant sites along and near the Riverfront as centers of activity
- Foster educational opportunities, specifically ones that focus on the importance of the River in the development of the community
- Create an animated and activated waterfront through programming and amenities; thereby drawing people to the waterfront and creating a catalyst for private investment
- Create transition zones between the River and the uplands that promote contact with the waterfront via more hardscaped zones in the Downtown District and vegetated, natural riparian zones in the remaining areas.

POLICY 1.1:

Concentrate development and redevelopment in order to revitalize deteriorated and underutilized waterfront sites and strengthen the overall waterfront focus of the City of Jamestown.

New development or redevelopment should be located where infrastructure is adequate or can be upgraded to accommodate such development. The scale of development or redevelopment along the waterfront should be appropriate to the setting and character of the area and highlight existing resources, such as the local history and important natural or man-made features to reinforce community identity. Enhancement, development and/or redevelopment efforts should be primarily focused in four general areas:

1) Within the **Chadakoin Outlet District,** shoreline preservation/restoration would help mitigate flood events and provide valuable habitat
2) Along/near the southern and to a limited extent northern side of the Chadakoin River between Main Street and the BPU facility
3) Within the Medical Corridor in the vicinity of Foote, Institute, and Harrison Streets
4) Along River Street within the **Industrial Heritage Corridor**

McCrea Point is, in many ways, a gateway between Chautauqua Lake and Downtown Jamestown, and redevelopment efforts should reflect this, including the development of an actual gateway feature that welcomes residents, workers and visitors and provides a linkage to the waterfront. A Nature and Educational Center which highlights the River's importance in the historical development of the community and celebrates the valuable and beautiful ecological resources located in the vicinity (including the Chadakoin River and Class 1 wetland complex) should be constructed near or within McCrea Point Park to serve as the City's gateway feature. The center should include a transportation hub which connects boat users, vehicular users, and pedestrians/bicyclists with some form of public transportation which connects with the Downtown.

The area along/near the eastern shoreline of the Chadakoin River within the **Chadakoin Outlet District** should be designed for recreational and natural education purposes while respecting the ecological integrity of the many nearby natural resources. Enhancements should include construction of the ***Chadakoin Park Bike Trail*** connecting the NYS Bicycle Route 17 through Chadakoin Park (rather than along Washington Street) and construction of boardwalks through the wetland complex for educational purposes. Limited mixed use development which respects the ecological integrity of the area and provides ancillary support for the trail, Chadakoin Park, and the Nature and Educational Center should be encouraged.

The area along the Chadakoin River between Main Street and the BPU facility within the **Downtown District** should be designed and developed as a focus for activity, drawing locals and tourists alike to the area and linking Chautauqua Lake to the Downtown via several modes of transportation. Development should concentrate on integration with the Riverwalk Trail network and promote programmable spaces.

Revitalization efforts in the City should focus on creating conditions that will bring people to the waterfront and drive economic activity in these areas. One result of the increased demand for property along the waterfront within the **Downtown District** will be the gradual phasing out of existing non-water-compatible uses located along the waterfront. As the Study Area transitions into a vibrant waterfront, existing businesses with inconsistent uses may opt to take advantage of the increased property values to relocate to other, more appropriate areas of the City (such as the East End Industrial Corridor). When these situations arise, the City should work closely with these business owners to assist with the selection of new property within the City that meets the needs of the businesses as well as is consistent with the vision for the redevelopment of the City. Until such a time,

however, screening techniques should be utilized, wherever appropriate, to screen the non-water-compatible uses from view of the waterfront.

The Medical Corridor in the vicinity of Foote, Institute, and Harrison Streets within the **Downtown District** should be designed and developed in a comprehensive and thematic way, linking the growing medical uses within the area while taking advantage of the "healthy" recreational opportunities associated with the nearby waterfront.

The area along River Street within the **Industrial Heritage Corridor** should be assembled and evaluated for environmental concerns with the ultimate goal of providing shovel ready sights for industrial development. The focus of development within in the **East End Industrial Corridor** should be as in-fill of commercial and industrial operations to most effectively utilize land in this already developed area. In both areas, waterfront development should allow for improved access to the River for workers in the area as well as the public.

In all cases, development and redevelopment decisions should be compatible with ecological/watershed health, community and regional needs, as well as market demands. In addition, the environmental quality of degraded areas should be restored and environmental resources (such as water quality in the River) and the functions of environmental resources (such as the ability of wetlands to filter urban runoff) should be recognized and enhanced during the development or redevelopment of certain areas. The following items should be considered:

1. New development should be located where infrastructure is adequate or can be upgraded to accommodate new development or redevelopment.

2. The following planning principles should be used to guide investment and the preparation of development strategies and plans for the waterfront:
    a. Scale development to be appropriate to the setting.
    b. Design development to highlight existing resources, such as local history and important natural and man-made features to reinforce community identity.
    c. Design the waterfront as a focus for activity that draws people to the area.
    d. Provide and improve integrated linkages between the waterfront and upland portions of the community, including the use of appropriate directional signage, particularly for the residential neighborhoods that have been isolated from this area.
    e. Create "Complete Streets" (discussed in detail in the attached Ecological Conditions and Living Infrastructure Framework document) as appropriate.
    f. Meet community and regional needs and market demands when making development choices so that the end product provides a useful service and benefits and connects with the surrounding area.
    g. Recognize and enhance existing environmental resources and functions during development and devise ways to blend

environmental preservation into site design, wherever appropriate, to achieve development without adversely impacting important environmental resources and ecological function.

h. Restore environmental quality to degraded areas for both resource preservation and urban revitalization.

3. All development or uses should recognize the unique qualities of both the man-made and natural waterfront by:
    a. Using building and site design to make beneficial use of the waterfront location and associated waterfront resources.
    b. Minimizing consumption of waterfront lands that does not meet the intent of this policy or that would result in potential adverse impacts on man-made and natural resources.
    c. Incorporating recreational activities, public access, open space and other such amenities into waterfront designs, as appropriate, to enhance the subject site and the surrounding community, and to increase visual and physical access to the Chadakoin River while supporting of enhancing ecological function.
    d. Attracting people to the waterfront, as appropriate to the use.
    e. Reinforcing community identity by highlighting local history and ecology and important natural and man-made features.
    f. Ensuring that design and siting of uses and structures complements the surrounding community and landscape, particularly within the central business district.
    g. Using native plants as components of landscape design to improve habitat and water quality, and to lessen water demands.
    h. Using appropriate signage and other amenities to promote tourist activities and ensure better wayfinding along the waterfront.

POLICY 1.2:

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

All uses proposed for the waterfront should relate to the unique character of the waterfront area and should be appropriate for the location. Along the waterfront, water-dependent uses should be promoted and given precedence over other types of development. Existing water-dependent uses should be protected. Development that is not dependent on a waterfront location or that cannot make beneficial use of such a location should be discouraged. Water-enhanced uses may be encouraged where they are compatible with surrounding development and ecological resources and are designed to make beneficial use of their location along the River, particularly if they reinforce a nearby water-dependent use. Development inconsistent with the intended goals of waterfront development should be discouraged.

1. Future water-dependent uses and water-enhanced uses should be sited and designed to:
    a. Attract people to or near the waterfront and provide opportunities for access.
    b. Provide public views to or from the water.
    c. Promote ecological function in natural resource areas.
    d. Link the waterfront to adjoining business districts.
    e. Link the waterfront to adjoining residential neighborhoods.
    f. Create space between built structures and the River to allow access to the water (in the **Downtown District**) and/or create riparian treatment zones (in the remaining Districts).
    g. Improve community character and enhance surrounding land and water resources.

2. Future uses should be avoided that would:
    a. Result in unnecessary and avoidable loss of waterfront resources such as waterfront access and water quality.
    b. Result in adverse effects on the existing ecological resources (viz., wetlands and open space for habitat).
    c. Ignore the waterfront setting as indicated by design or orientation.

3. Current uses should be modified as appropriate to increase the consistency of character within each subarea of the waterfront:
    a. Development with waterfront-compatible uses should be encouraged to embrace their waterfront location and create amenities that take advantage of the waterfront.
    b. When market conditions along the **Downtown District** waterfront improve, increasing waterfront property values and making it financially favorable for existing waterfront-incompatible uses to relocate to other portions of the City (such as industrial operations moving to the **East End Industrial Corridor**), redevelopment projects that improve scenic and environmental impacts on the waterfront should be encouraged.

POLICY 1.3:

Protect and improve stable residential areas.

Residences in and around the waterfront contribute to the vibrancy of the area through providing living accommodations close to the River, thus encouraging human contact and interaction with the waterfront. The existing residential neighborhoods along and near the waterfront are important to the overall community character and economic functioning of the area.

The following standards should be considered when reviewing proposed projects:

- New development located in or adjacent to residential areas should be compatible with neighborhood character.
- New uses in stable residential neighborhoods should be avoided when their size or scale would significantly impact the character of the area.
- New construction, redevelopment and associated screening, such as fences and landscaping, should not reduce or eliminate vistas that connect local residents or visitors to the waterfront or views that are otherwise important to the surrounding area.
- Buffering that does not reduce or eliminate vistas that connect people to the water may be considered to separate non-compatible uses.
- The loss of informal access points to the waterfront should be evaluated. In the case of a loss of access points, the provision of new public access points shall be encouraged.
- The primary type of residential dwelling within the Study Area is the single-family home. However, many residents are better served with a variety of residential offerings. Multi-tenant condominiums or other such dwelling are becoming the preferred dwelling in urban areas, and such units would be appropriate for the **Downtown District**. Therefore, this type of development should be encouraged.

Public access improvements should also be emphasized to better establish the connection between residential areas and the waterfront. Linkages are also important and should be created through the creation of spurs from the Riverwalk Trail system into neighborhoods along 'green streets.'

POLICY 1.4:

Maintain and enhance natural areas, recreation areas, and open space.

Natural areas, open space and recreational lands provide many health, economic, and cultural benefits to the public. Some of these benefits may be felt immediately while others may be less tangible, but more long-term in effect. In addition to scenic and recreational benefits, these lands also support habitat for important fish and wildlife and provide watershed management for flood control benefits. Special consideration should be given to protecting freshwater wetlands, natural shorelines, and significant habitats. The expansion of infrastructure into undeveloped areas should be avoided where such expansion would be detrimental to waterfront resources, important natural resources, or the character of the waterfront community, particularly in the **Chadakoin Outlet District**.

To enhance community character and maintain the quality of the natural environment, potential adverse impacts that may result from site development, including impact to existing development, the physical environment, and economic factors should be identified and avoided. Development and redevelopment should be designed to take advantage of significant site characteristics, limit the

disturbance of important natural resources, foster visual compatibility with the surrounding area, and maintain the continuity of public access along the water's edge in a way that is respectful of ecological function.

1. Adverse impacts on natural resources should be avoided, including, but not limited to:
    a. Deterioration of water quality.
    b. Loss, fragmentation, and impairment of habitats and wetlands.
    c. Changes to the natural River processes that would increase shoreline flooding and erosion.

2. Continue to extend Riverwalk along/near the waterfront and into nearby residential neighborhoods, ensuring that it is sufficiently wide enough to allow for pedestrian and bicycle travel.

3. The expansion of infrastructure into undeveloped areas should be avoided where such expansion would promote growth and development that would be detrimental to important natural resources or in any way impact or reduce opportunities for public recreation.

POLICY 1.5:

Minimize potential adverse land use, environmental and economic impacts that would result from proposed development within the Waterfront Revitalization Area.

To enhance community character and maintain/improve the quality of life along the waterfront in the City of Jamestown, the potential adverse impacts of new development and redevelopment on existing land uses, ecological function in the natural environment and the local economy should be properly assessed and mitigated, as required. Development should reflect the recognition of existing site characteristics, limit disturbance of land and water, and foster visual compatibility with surrounding areas. The size and scale of development or redevelopment should be compatible with the character of the surrounding area, the adjacent Riverfront and the City as a whole.

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

1. Potential adverse land use impacts should be minimized as follows:
    a. Develop in a manner consistent with surrounding land uses and the intended future land use of the waterfront.

2. Potential adverse environmental impacts should be minimized as follows:
    a. Consider potential impacts to water quality, ecology and other environmental concerns.
    b. Promote integrated design along the waterfront that celebrates ecological function, while improving public access and waterfront amenity.
    c. Improve habitat and increase green space whenever possible.

3. Potential adverse economic impacts should be minimized as follows:
    a. Prevent deterioration of the waterfront and the surrounding area by eliminating derelict and dilapidated conditions.
    b. Avoid uses that detract from community character of the waterfront.
    c. Prevent the isolation of community uses and people from the waterfront.
    d. Protect and enhance the economic base of the community and promote diverse economic activity.

POLICY 2:

Preserve historic resources within the City of Jamestown's Waterfront Revitalization Area.

The historic resources in the City of Jamestown are a reminder of the community's early development and its rich waterfront tradition. The **Chadakoin Outlet District** and the western portion of the **Downtown District** (particularly McCrea Point) have a significant cultural and waterfront history that should be celebrated. Additionally, the **Industrial Heritage Corridor** and to a certain extent the **East End Industrial Corridor** have a notable industrial heritage that should be recognized. These resources not only provide points of interest for residents and tourists, they become valuable links with the region's past. This policy recognizes the importance of preserving such treasures, as well as the overall quality of the adjacent areas.

Three structures within the Waterfront Revitalization Area are listed on the State or National Register of Historic Places. In addition, the New York State Archaeological Sensitivity Map identifies large portions of the Waterfront Revitalization Area as containing Archeologically Sensitive Areas. These areas include the northern and southern portions of the **Chadakoin Outlet District**, the western portion of the **Downtown District**, the eastern portion of the **Industrial Heritage Corridor**, and the entire **East End Industrial Corridor**.

Both archeological sites and historic structures are tangible links to the past development of the City of Jamestown. They are important components in defining the area's distinctive identity and heritage. The intent of this policy is to preserve the historic and archeological resources within the City of Jamestown's Waterfront

Revitalization Area by encouraging and promoting private efforts to restore, conserve and maintain historic structures.

Historic resources that would be covered under this policy include those structures, landscapes, districts, areas or sites, or underwater structures or artifacts that are listed or designated as follows:

- Any resource on, nominated to be on, or determined to be eligible for listing on the National or State Register of Historic Places;
- Any cultural resource managed by the State Natural and Historic Preserve Trust or the State Natural Heritage Trust;
- Any archaeological resource that is on the inventories of archaeological sites maintained by the State Education Department or the State Office of Parks, Recreation and Historic Preservation; and,
- Any locally designated historic or archaeological resources protected by a local law or ordinance.

Additionally, other structures and landmarks may be of significance and could be designated as such under one of the programs listed above. In such cases, the following elements would be used to determine the potential significance of the structure or landmark:

- In identifying those elements that are important in defining the character and value of an historic resource, designation information, available documentation and original research should be used.
- Important character-defining elements of the resource should be identified in terms of:
    - Time, place and use;
    - Materials, features, spaces and spatial relationships;
    - Setting within the physical surroundings and community; and,
    - Association with historic events, people or groups.
- The value of the historic resource should be determined as indicated by:
    - Its membership within a group of related resources, that would be adversely impacted by the loss of any one of the group;
    - The rarity of the resource in terms of the quality of its historic elements or in the significance of it as an example; or,
    - The significance of events, people or groups associated with the resource.

POLICY 2.1:

Maximize preservation and retention of historic resources.

This policy provides standards by which the rich historical resources within the City of Jamestown's Waterfront Revitalization Area should be protected and preserved. This can be accomplished through public expenditures where feasible, and through prohibiting incompatible development on adjacent lands which could destroy the

character of the historic resource. The City of Jamestown can help preserve, protect and enhance historic resources through the following:

1. Recognize that public investment in historical development is important to illustrate a commitment to the business community who may later invest. Appropriate public improvements should be completed; funds, in the form of existing grants or low interest loans, are available and should be sought for these improvements.

2. Promote the designation and protection of historic landmarks that reflect elements of the region's culture, social, economic, political and architectural history. These landmarks should be rehabilitated, when possible, and promoted in the community.

3. Potential impacts to historic resources in the Waterfront Revitalization Area should be thoroughly evaluated through the environmental review process. All practical means should be utilized to preserve identified resources and mitigate or avoid potential adverse impacts.

4. The historic character of significant resources identified in the City shall be preserved by protecting historic materials and features as follows:
    a. Evaluate the physical condition of important materials and features.
    b. Stabilize materials and features to prevent further deterioration.
    c. Protect important materials and features from inadvertent or deliberate removal or damage.
    d. Ensure the protection of historic elements through a program of non-intrusive maintenance of important materials and features.

5. Repair historic materials and features using recognized preservation methods when physical condition warrants such repair.

6. Foster uses that maximize retention of the historic character of a resource and minimize alterations so as to preserve and retain the character of the structure.
    a. Alterations should not obscure, destroy or radically change character defining spaces, materials, features or finishes in order to reduce adverse impacts to the resource.
    b. Alterations may include selective removal of features that are not historic elements of the resource and its setting and that detract from the overall historic character of the resource.
    c. Minimize potential negative impacts on the historic character of the resource due to necessary updates to systems in order to meet health and safety code requirements or to conserve energy.
    d. In constructing new additions, use appropriate design and construction to minimize adverse impacts to historic character and allow for the visual compatibility of the new and old sections of structure.

7. The loss of historic resources or the historic character of the area shall be minimized when it is not possible to completely preserve the resource.
    a. Historic structures should be relocated only when the resources cannot be preserved in place.
    b. Demolition of a resource should only be allowed where alternatives for retention are not feasible.

8. Avoid potential adverse impacts of development and redevelopment on adjacent or nearby historic resources.
    a. Historic resources should be protected by ensuring that development is compatible with the historic character of the affected resource.
    b. Potential development should be designed to a size, scale, proportion, mass and with a spatial relationship compatible with the historic resource.
    c. Potential development should be designed using materials, features, forms, details, textures and colors compatible with similar features of the historic resource.

9. Limit adverse cumulative impacts on historic resources.
    a. Minimize the potential adverse cumulative impact on an historic resource that is a member of a group of related resources, which may be adversely impacted by the loss or diminution of any one of the members of the group.
    b. Minimize the potential cumulative impacts of a series of otherwise minor interventions on an historic resource.
    c. Minimize potential cumulative impacts from development adjacent to the historic resource.

POLICY 2.2:

Protect and preserve archeological resources.

This policy provides standards by which the archeological resources within the City of Jamestown's Waterfront Revitalization Area should be protected and preserved. The significance of the Chadakoin River waterfront to early settlements requires that a careful review of archaeological resources be made prior to undertaking any action. Every effort should be made to identify and protect archaeological resources significant to the community.

A cultural resource investigation should be conducted when an action is proposed on an archeological site, fossil bed, or in an area identified for potential archeological sensitivity on the archeological resources inventory maps prepared by the New York State Historic Preservation Office. If impacts are anticipated on a significant archeological resource, the following actions should be undertaken:

1. Potential impacts to archaeological resources in the Waterfront Revitalization Area should be thoroughly evaluated through the environmental review process.

2. When a development action is proposed in the City of Jamestown, an assessment of potential cultural resources will be conducted.
    a. The assessment will consist of, at a minimum, a review of existing literature on cultural resources.
    b. A site survey may be necessary to determine the presence or absence of cultural resources in the project area.
    c. If cultural resources are discovered as a result of the initial survey, a detailed evaluation will be conducted to provide adequate data to allow for a determination of the significance of the archaeological resources.

3. If the potential for impacts to an archaeological resource exists, adverse impacts shall be minimized by:
    a. Redesigning the project,
    b. Mitigating direct impacts on the resources, or
    c. Recovering significant data/resources prior to construction.

4. Disturbance or adverse impacts to any archaeological resources situated on or under lands owned by the State of New York shall be avoided. These resources may not be appropriated for private use.

5. With respect to activities that involve excavation in the City of Jamestown, public agencies and utilities should contact the New York State Office of Parks, Recreation and Historic Preservation to determine appropriate protective measures for archaeological resources.

POLICY 2.3:

Protect and preserve significant cultural resources.

The Chadakoin River has been the site of substantial historic development activity that has contributed to its culture and its identity. This policy addresses the importance of maintaining these cultural resources and integrating them into the City's modern culture. It is recognized that these resources can play a significant role in marketing efforts and in the overall economic development of the area.

1. An inventory of cultural and archeological site and cultural events would play a key role in the protection and preservation of significant historic resources. This information could then be integrated into local historical literature. Local officials could then work with State to determine whether any of the information collected is worthy for inclusion on the State or National Register of Historic Places.

2. Where appropriate, seek to preserve the historic character of the City of Jamestown's Waterfront Revitalization Area. The City should strive to maintain appropriate scales, intensity of use and architectural style in this area. In addition, interpretive materials should be provided to foster appreciation and understanding of the area's maritime heritage and development.

POLICY 3:

Enhance visual quality and protect scenic resources throughout the City of Jamestown's Waterfront Revitalization Area.

Waterfront landscapes possess inherent scenic qualities. The presence of water and the ever-changing views and visually interesting working landscape draw people to the water's edge. Due to their importance, scenic resources should be considered in balancing the wise use and conservation of the waterfront.

In many areas of the City of Jamestown, the waterfront can be difficult, if not altogether impossible, to see. While historically the development of Jamestown centered on the River, with the introduction of the rail, increased pollution of the River, and diminished need for hydro-electric power, the City turned its back on the River. In many cases industries even built over the top of the River (ex. Dahlstrom Complex, Brooklyn Square, etc.). The City has worked tirelessly to reintroduce the River as a positive asset to the community. In doing so, several areas of the waterfront are now visually accessible to the general public, particularly from Riverwalk, the bridges, and public parks. However, many hidden gems are still not publically accessible and wait to be incorporated into the community's growing list of scenic resources. The visual character and quality of the Chadakoin River and surrounding natural environment, including sufficient visual access, are important resources that should be enhanced and protected.

POLICY 3.1:

Protect and improve the visual quality of the Chadakoin River.

The area surrounding the Chadakoin River provides a growing number of opportunities for enjoying high quality scenic vistas of the waterfront and surrounding urban and natural environments. The City of Jamestown needs to protect existing areas of high visual quality and improve areas with poor or non-existent visual quality of the Chadakoin River (see Figure 16) by adhering to the following standards and guidelines:

1. Minimize introduction of components which would be discordant with existing scenic components and character.

2. Restore deteriorated and remove degraded visual components.

3. Screen components which detract from visual quality.

4. Use appropriate siting, scale, form, and material to ensure structures are compatible with and add interest to existing scenic components.

5. Development should proceed in a manner that improves, or, at a minimum, does not negatively impact visual quality.

6. Preserve existing vegetation and establish new native vegetation to enhance scenic quality:
    a. Preserve existing vegetation, which contributes to the scenic quality and ecological function of the landscape.
    b. Allow for limited, selective clearing of non-native or invasive vegetation to provide public views without impairing values associated with the affected ecological function.
    c. Restore historic or important designed landscapes to preserve intended or designed aesthetic values.
    d. Restore or add vegetative cover that presents a natural appearance and enhances ecological function along riparian corridor.

7. Improve the visual quality of historic structures and sites throughout the waterfront area as defined in this LWRP.

8. To the extent possible, enhance and protect the visual interest provided by active water-dependent uses.

9. Anticipate and prevent impairment of dynamic landscape elements that contribute to ephemeral visual qualities, such as the seasonality of native vegetation along the River corridor and uplands.

10. Protect visual quality associated with public lands, including public transportation routes, public parks and public trust lands and waters.
    a. Limit water surface coverage or intrusion to the minimum amount necessary.
    b. Limit alteration of shoreline elements which contribute to scenic quality and ecological function.

11. Protect visual quality associated with open space and natural resources.
    a. Promote shoreline enhancements that enhance visual quality while strengthening ecological function.
    b. Maintain or restore original landforms except where altered landforms provide useful screening or contribute to scenic quality.
    c. Group or orient structures to preserve open space and provide visual organization.
    d. Avoid structures or activities which introduce visual interruptions to natural landscapes including:

i. Introduction of intrusive artificial light sources
ii. Fragmentation of, and structural intrusion into open space and natural resource areas
iii. Modifications to the continuity and configuration of natural shorelines and associated vegetation

3.2 NATURAL WATERFRONT POLICIES

POLICY 4:

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

Based on the fact the Chadakoin River is the only outlet of Chautauqua Lake, water level and flooding concerns within the LWRP Study Area are directly impacted by the needs of Chautauqua Lake. Considerable study has been done on lake levels and flooding around Chautauqua Lake and along its outlet at the Chadakoin River. Recognizing that both high water levels and low water levels may cause property damage, and cause difficulties to riparian property owners, the Chautauqua County Planning Department, the New York State Department of Environmental Conservation and the Jamestown Board of Public Utilities worked to address standard lake level regulation. Through a contractual agreement between these three agencies, and in accordance with the Chautauqua Lake Regulation Plan, the lake levels may be influenced by means of controlled releases through the Warner Dam to provide for optimum flood storage capacity and recreation season conservation storage. These efforts have helped to minimize the risk of flooding in both the Lake and Riverfront communities in a cost effective manner, yet in no way can these efforts guarantee that flooding will not occur.

The large wetland complexes located within the **Chadakoin Outlet District** compose the majority of the 100-year floodplains within the LWRP Study Area. Narrow 100-year floodplains can be found along the River downstream of the wetland complexes, most located in the **East End Industrial Corridor**. The City of Jamestown participates in the National Flood Insurance Program (NFIP) and development in the floodplain is regulated under Chapter 145 of the City Code – Flood Damage Prevention. This law is designed to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas, as designated on the Flood Insurance Rate Maps. Pursuant to Chapter 145, all construction and other development that is proposed within the regulated areas of special flood hazard requires a floodplain development permit from the Building Inspector and must be in compliance with the standards outlined in the law.

Erosion of the shoreline of the Chadakoin River has not been a significant problem to date as much of the shoreline is armored, particularly in the **Downtown District**, the **Industrial Heritage Corridor**, and to a slightly more limited extent, the **East End Industrial Corridor**.

POLICY 4.1:

Minimize flooding and erosion within the City of Jamestown's Waterfront Revitalization Area through the use of appropriate management measures.

This policy includes standards directed at protecting life and property using measures that are presented in order of priority. These areas are designated by the State Department of Environmental Conservation pursuant to the Coastal Erosion Hazard Areas Act of 1981 (Article 34 of the Environmental Conservation Law), and any coastal area included within a V-zone on Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency pursuant to the National Flood Insurance Act of 1969 (P.L. 90-448) and the Flood Disaster Protection Act of 1973 (P.L. 93-234).

1. Enhance existing natural protective features by the use of non-structural measures that are likely to manage erosion.

2. Use vegetative, non-structural measures to manage flooding and erosion where shoreline characteristics allow.

3. Locate development and structures away from areas of known flooding and erosion hazards.

4. While it is acknowledged that usable land area can be lost with the installation of erosion and flood control measures, every effort will be made to prevent the loss of public lands and public trust lands. Most lands under water are held by the State in the public trust, unless ownership has been granted to an upland owner. Even if filling for erosion control takes place, ownership of the filled land remains with the State.

POLICY 4.2:

Preserve and restore natural and man-made protective features within the City of Jamestown's Waterfront Revitalization Area.

Natural protective features include unique elements of the non-built environment such as wetlands and associated natural vegetation. As flooding and erosion control protective features, these are considered superior to man-made protective features and should be preserved whenever possible.

Natural protective features that minimize the potential for flooding and erosion shall be restored and preserved to the maximum extent practicable. Development and other activities shall maximize the protective capabilities of natural protective features by:

1. Minimizing interference with natural shoreline/waterfront processes by limiting intrusion of structures into surface waters and associated wetlands.

2. Using practical vegetative approaches to stabilize natural shoreline and stream bank features.

3. Avoiding alteration or interference with natural conditions.

4. Enhance existing natural protective features.

5. Restoring the condition of impaired natural protective features wherever practical.

6. Managing activities to limit damage to, or reverse damage which has diminished the protective capacities of natural features.

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

8. Implementing proper maintenance and operation of the Warner Dam to minimize the potential for flooding and erosion.

POLICY 4.3:

Properly manage navigational infrastructure to minimize adverse impacts on waterfront areas and riverfront processes.

Much of the Chadakoin River as it passes through the City cannot readily support navigation. However, to the extent that portions of the River (to the west of the Warner Dam) can support navigation, the applicable U.S. Army Corps of Engineers and New York State Department standards would apply.

POLICY 4.4:

Expend public funds for the management or control of flooding and erosion only in areas that will result in proportionate public benefit.

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

1. The expenditure of public funds for flooding and erosion control projects:
    a. Should be limited to those circumstances where public benefits exceed public costs;

b. Is prohibited for the exclusive purpose of flooding and erosion protection for private development; and
c. May be apportioned among each level of participating governmental authority according to the relative public benefit accrued.

2. Factors to be used in determining public benefits attributable to the proposed flood or erosion control measure include the:
    a. Economic benefits derived from protection of public infrastructure and investment and protection of water-dependent commerce.
    b. Protection of significant natural resources.
    c. Integrity of natural protective features.
    d. Extent of public infrastructure investment.
    e. Extent of existing or potential public use.

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

POLICY 5:

Protect and improve water resources within the City of Jamestown's Waterfront Revitalization Area.

The purpose of this policy is to protect the quality and quantity of surface water in the City of Jamestown Waterfront Revitalization Area, including the Chadakoin River, one classified tributary, and numerous non-classified water bodies. Water quality considerations include the management of both point and non-point source pollution. Water quality protection and improvement must be accomplished by managing new, and remediating existing, sources of water pollution.

POLICY 5.1:

Prohibit direct or indirect discharges, which would cause or contribute to contravention of water quality standards and targets in local surface waters.

The following standards apply to discharges within the Study Area:

1. Prevent point source discharges to the surface waters of the Chadakoin River, tributaries, and other water bodies, and manage or avoid land uses that would:
    a. Exceed discharge limits specified by State Pollution Discharge Elimination System (SPDES) permits for industrial and municipal discharges.

b. Exceed established and applicable effluent requirements or cause or contribute to the contravention of water quality classifications and use standards.
c. Materially and adversely affect the quality of receiving waters.

2. Ensure effective treatment of sanitary waste and industrial discharges by:
   a. Maintaining efficient operation of sanitary wastewater and industrial waste treatment facilities.
   b. Providing, at a minimum, effective secondary treatment for sanitary sewage.
   c. Modifying existing sewage treatment facilities to provide improved nitrogen removal capacity.
   d. Incorporating treatment beyond secondary, when funding is available to the extent economically feasible, with particular focus placed on nitrogen removal, as part of new or upgraded wastewater treatment plant design.
   e. Reducing demand on treatment facilities by:
      i. Reducing infiltration of excess water in collection and transport systems.
      ii. Eliminating unauthorized collection system hookups.
      iii. Pre-treating industrial waste.
      iv. Limiting discharge volumes and pollutant loadings to or below authorized levels,
      v. Requiring the installation of low-flow water conservation fixtures in all new development and when replacing fixtures in existing development.
      vi. Controlling and reducing the loadings of toxic materials into the surface waters of the River, tributaries, and other water bodies by including limits on toxic metals as part of wastewater treatment plant effluent permits and by enforcing existing pretreatment requirements.
   f. Reducing or eliminating combined sewer overflows.
   g. Providing and managing on-site wastewater disposal (septic) systems by:
      i. Using on-site systems only when impractical to connect with a public sewer system.
      ii. Protecting surface and groundwater against contamination from pathogens and excessive nutrient loading by keeping septic effluent separated from these resources and by providing adequate treatment of septic effluent.
      iii. Encouraging evaluation and implementation of alternative or innovative onsite sanitary waste systems and technologies to remediate systems that currently do not adequately treat or separate effluent.

POLICY 5.2:

Minimize non-point source pollution entering surface waters and manage activities that cause non-point source pollution.

Non-point pollution is that which originates from sources that are not localized or easily identifiable. In general, non-point pollution results from various ways that the land is used: runoff from farms and agricultural operations, drainage and runoff from urbanized areas, or littering by people living or traveling in an area. As such, measures can be taken which can prevent or alleviate non-point pollution in the Chadakoin River area.

Minimize non-point pollution of the City of Jamestown's water resources using the following approaches, presented in order of priority:

1. Limit or eliminate non-point sources of pollution by:
    a. Reducing or eliminating the introduction of materials that may contribute to non-point source pollution.
    b. Prohibiting the outdoor or uncontained storage of materials that may contribute to the pollution of surface or groundwater in the waterfront area.
    c. Minimizing activities that would increase off-site stormwater runoff and the transport of pollutants.
    d. Controlling and managing stormwater runoff to minimize the transport of pollutants, restore (to the greatest extent possible) degraded natural stormwater runoff conditions, and achieve a no-net increase of runoff where unimpaired stormwater runoff conditions exist.
    e. Retaining or establishing vegetation to maintain or provide soil stabilization and filtering capacity.
    f. Promoting site-integrated stormwater management practices to help treat stormwater closer to the source, through green infrastructure.
    g. Preserving natural hydrological conditions to maintain natural surface water flow characteristics and retain natural watercourses and drainage systems (where present).
    h. Where natural drainage systems are absent or incapable of handling the anticipated runoff demands, developing open vegetated drainage systems as a preferred approach, with long and indirect flow paths to decrease peak runoff flows, and using closed drainage systems only where site constraints and stormwater flow demands make open systems infeasible.

2. Reduce pollutants loads to water resources by managing unavoidable non-point sources of pollution and use appropriate best management practices as determined by site characteristics, design standards, operational conditions, and maintenance programs. Reduce non-point source pollution using specific management measures appropriate to specific land use or pollution source categories.

a. Urban land uses
- For new development, manage total suspended solids in runoff to remain at predevelopment loading levels.
- For site development, limit activities that increase erosion or the amount or velocity of stormwater runoff.
- For construction sites, reduce erosion and retain sedimentation on site, and limit and control the use of chemicals and nutrients.
- For developed sites, limit the application of pesticides, herbicides and fertilizer products to reduce the potential for the pollution of stormwater runoff.
- Plan, site and design roads and highways to manage erosion and sediment loss and limit the disturbance of land and vegetation.
- Plan and design bridges to protect ecosystems.
- For roads, highways and bridges, minimize to the greatest extent practical, the runoff of contaminants to surface waters.
- Use vegetated stormwater treatment such as bioswales, bioretention, and tree pits as appropriate.
- Install complete streets on major roadways into and out of Jamestown, as described in Supporting Document 2: Ecological Conditions and Living Infrastructure Framework.
- Install green fingers along secondary streets as appropriate to promote ecological function along the street through integrated stormwater management and native vegetation, and improved access to green space (as described in Supporting Document 2: Ecological Conditions and Living Infrastructure Framework).

b. Hydro-modifications
- Maintain the physical and chemical characteristics of surface waters, reduce adverse impacts and, where possible, improve the physical and chemical characteristics of surface waters in channels.
- Minimize the impacts of channelization and channel modification on in-stream and riparian habitat, and identify opportunities to restore habitat.
- Use vegetative means, to the greatest extent possible, to protect stream banks and shoreline from erosion.
- Foster the creation of a Living Infrastructure Network, as described in Supporting Document 2: Ecological Conditions and Living Infrastructure Framework.

c. Floatables and litter
- Prohibit all direct and indirect discharges of refuse or litter into surface waters, or upon public lands contiguous to and within 100 feet of the River.

- Limit the entry of floatable materials to surface waters through the proper containment and prevention of litter.
- Remove and dispose of floatables and litter from surface waters and the shoreline of the River, especially where it collects at Warner Dam.
- Implement pollution prevention and education programs to reduce the discharge of floatables and litter in the River and City storm drains.

POLICY 5.3:

Protect and enhance water quality in the Chadakoin River and associated wetlands complex.

1. To the greatest extent possible, improve the water quality of the River and associated wetlands complex based on an evaluation of physical factors (pH, dissolved oxygen, dissolved solids, nutrients, odor, color and turbidity), health factors (pathogens, chemical contaminants, and toxicity), and aesthetic and nuisance factors (oils, floatables, refuse and suspended solids).

2. Minimize the disturbance of the River, including its bed and banks, in order to prevent erosion of soil, increased turbidity, and irregular variation in velocity, temperature, and level of water.

3. Protect the surface water quality of the River and associated wetlands complex from the adverse impacts associated with excavation, fill, dredging and the improper disposal of dredged materials.

4. Utilize, as feasible and economically practicable, street sweeping resources to reduce the amount of pollutants, sediments and litter that enters surface waters through storm drains.

5. Encourage the use of best management practices to prevent non-point source pollution, including:
    a. Limiting the application of fertilizers, herbicides and pesticides and avoiding the use of synthetic fertilizers that contribute nitrates and phosphorus to runoff.
    b. Avoiding secondary discharges of pollutants, such as petroleum products to storm drains that discharge directly to surface waters.
    c. Properly cleaning up pet wastes and controlling litter.
    d. Promote site-integrated stormwater management practices to help treat stormwater closer to the source, through green infrastructure.

POLICY 6:

Protect and restore ecosystem quality and function within the City of Jamestown's Waterfront Revitalization Area.

There are certain natural resources in the City of Jamestown that warrant protection and restoration. These resources, which include the Chadakoin River, its associated wetlands complex, important plant and animal populations and habitats, and sensitive ecological communities, all contribute to the quality of life in the City and the diversity of the local ecosystem. The purpose of this policy is to protect and restore these ecological resources.

POLICY 6.1:

Protect and restore locally significant fish and wildlife habitats.

The Chadakoin River has no designated Significant Coastal Fish and Wildlife Habitats identified by the New York State Department of Environmental Conservation (NYSDEC) or the Department of State. However, NYSDEC records reveal that one species of State Special Concern, the Eastern spiny softshell turtle, was found in the LWRP Study Area. During fieldwork, evidence of these turtles was found in several of the canals which empty into the Chadakoin River (within the **Chadakoin Outlet District**), near the Riverwalk Center along the Riverwalk Trail (within the **Downtown District**), on the downstream end of the Warner Dam and further downstream in the Chadakoin River (especially near the Gateway Center) (also within the Downtown District).

In addition, records suggest that a New York State Endangered plant, Burdick's wild leek, was identified in the wetland complexes which encompass the bulk of the **Chadakoin Outlet District**. Burdick's wild leek is known only to occur in Chautauqua County and any harvesting or removal is prohibited. The US Fish and Wildlife Service Chautauqua County Federally listed endangered and threatened species list suggests the federally endangered Clubshell and Rayed bean mussel species are known or are likely to occur in the County. Further study would be required to determine if these species are present in the River.

Various species of fish can be found throughout the River. While none are recognized by the State as rare, threatened, or endangered, the fish are an important part of a small but active recreational fishing culture emerging along the waterfront.

The following standards should be followed in order to protect and restore locally significant fish and wildlife habitats as depicted in Figure 20:

1. Protect turtle and fish resources through measures including:

a. Any projects along the waterfront in the **Chadakoin Outlet District, Industrial Heritage Corridor,** and **East End Industrial Corridor** must be developed in a manner that ensures the protection of turtle and fish resources. Project reviewers should consider potential impacts on turtle and fish habitats, and the following actions should be taken as appropriate and applicable:
    i. Avoid activities that would destroy or impair habitats through physical alteration, disturbance or pollution, or indirectly affect the loss of habitat.
    ii. Schedule development or other activities to avoid vulnerable periods in life cycles of habitats.
    iii. Encourage a project design that will result in the least amount of potential adverse impact on habitats.
b. Any projects within the **Downtown District** must follow existing State and federal regulations regarding waterfront development.
c. Encourage community awareness of the turtle and fish resources through educational campaigns and strategically placed informational signs/kiosks

2. Restore significant fish and wildlife habitats through measures including:
    a. Reconstructing lost physical conditions to maximize habitat values including;
        i. Restoration of the natural shoreline and reintroduction of natural turtle nesting grounds in key areas along the River in the **Chadakoin Outlet District**, the **Industrial Heritage Corridor**, and the **East End Industrial Corridor**.
        ii. Consideration of design options promoting upstream passage of fish over man-made barriers (ex. Dahlstrom Dam and Warner Dam).
    b. Manipulating biological characteristics to emulate natural conditions through reintroduction of native flora and fauna.

POLICY 6.2:

Protect and restore freshwater wetlands.

Wetlands provide numerous benefits, including, but not limited to, habitat for fish and wildlife, erosion and flood control, natural pollution treatment, groundwater protection, and aesthetic open space. Within the **Chadakoin Outlet District**, the City possesses nearly 400 acres of "Class I" freshwater wetlands, which is the highest rank in New York State's four class ranking system. Development within these pristine wetland areas are regulated under Federal (US Army Corps of Engineers), State (New York State Department of Environmental Conservation), and Local (Chapter 149 of the City Code – Freshwater Wetlands) laws. The local law is designed to:

> *Preserve, protect, and conserve freshwater wetlands and the benefits derived therefrom, to prevent the despoliation and destruction of freshwater wetlands and to regulate the development of such wetlands in order to secure the natural benefits of freshwater wetlands consistent with the general welfare and beneficial economic, social and agricultural development of the City of Jamestown.*

Pursuant to Chapter 149, all regulated activity in any freshwater wetland or adjacent area requires a permit from the City of Jamestown Clerk and Department of Parks, Recreation, and Conservation and must be in compliance with the standards outlined in the law (see Figure 20 for location of wetlands).

In addition to the above mentioned laws, the following standards should be followed in order to protect and restore freshwater wetlands:

1. The following measures can further the protection or restoration of wetlands:
    a. Complying with the statutory and regulatory requirements of the Freshwater Wetlands Act, Stream Protection Act, and other applicable laws.
    b. Prevention of the net loss of wetlands by:
        - Avoiding placement of fill or excavation of wetlands;
        - Minimizing adverse impacts resulting from unavoidable fill, excavation or other activities; and
        - Providing and maintaining adequate buffers between wetlands and adjacent or nearby uses and activities in order to ensure protection of the character, quality, value and function of the wetlands area.

2. Any potential trail/boardwalk development projects through or adjacent to the wetlands complex to allow for public access to and educational opportunities focused on these natural areas may impact the wetlands. As with other types of development projects, adequate mitigation measures will be evaluated and implemented prior to commencing trail/boardwalk development

POLICY 6.3:

Prevent the further spread of invasive plant species through the use of aggressive management techniques.

Invasive plant species harm the ecological integrity of the natural landscape by multiplying to such levels as to outcompete and eliminate most forms of native vegetation. Invasive species typically aggressively spread throughout the ecosystem along water routes and through animal dispersal and soil movement. Within the **Chadakoin Outlet District**, two very aggressive, non-native invasive wetland plants

were found during a field investigation conducted by Biohabitats. ***Japanese knotweed*** was identified in the northwest corner of wetlands LW-10, within the City's storage facility north of Chadakoin Park, and along the proposed Chadakoin Park Bike Trail on the western edge of the City's storage facility. ***Common reed*** was observed in multiple locations throughout Chadakoin Park and its vicinity. Both of these plants currently exist in small patches, but if left unchecked, will most likely aggressively spread along the bike and river corridor and throughout Chadakoin Park. Treatment of these plants will help to combat these invasive species, preserve the ecological integrity of the class "I" wetland complex, while allowing native vegetation to flourish.

The other three sub-areas which form the remainder of the LWRP Study Area are highly commercial and industrial in nature. River buffers typically range from 0 to 25 feet wide with few exceptions. Concrete and stone walls, gabions, bulkheads, and building foundations dominate shorelines. Biohabitats staff observed that invasive and pioneer species more adapted to these disturbed conditions dominate the riparian vegetation. These invasive species include ***honeysuckle***, ***multiflora rose***, ***Norway maple***, ***tree of heaven***, ***crown vetch***, ***buckthorn***, and ***Japanese knotweed***.

Invasive species management techniques should be implemented throughout the Study Area, including:

1. Aggressive removal of known invasive species would include:
    a. Mechanical removal is preferred over chemical removal.
    b. When appropriate, foliar treatments using herbicide/s should be implemented in the springtime.
    c. Reassessment in the late summer/early fall for follow-up mechanical removal and/or foliar treatment (several follow-up treatments may be required over several years).
    d. As the invasive species patches dies back, supplemental plantings of native plants may be needed if colonization is slow.

2. Plant native species in areas cleared of invasive plants. Include a diverse mix of native herbaceous and woody species, including some fast-growing trees and shrubs, to help suppress future invasive species establishment.

3. A monitoring program in association with Jamestown Community College or one of the local watershed/wildlife conservation entities should be established to review invasive species conditions within the Study Area on a regular basis.
    a. A prioritization should be created to identify the areas which should receive immediate attention.
    b. Areas in which new invasive species are noted or areas in which existing patches are spreading should be flagged and given priority for control.

POLICY 6.4:

Protect and restore the Chadakoin River shoreline.

Riparian and shoreline conditions differ between the **Chadakoin Outlet District** and the other three sub-areas. The 2.5 river miles of the Chadakoin from the Chautauqua Lake outlet to McCrea Point (primarily located within the **Chadakoin Outlet District**) consist of predominately natural shoreline and riparian areas. The two Class I wetlands buffer the majority of the River and are categorized as freshwater forested/shrub wetland. Human impacts within this area are limited to fill, debris and a patch of Japanese knotweed on the right bank near the Chautauqua Lake outlet; several small commercial and residential docks on the left bank where the River approaches Route 430; relic piling along the left bank across from McCrea Point; and the docks and grounds associated with McCrea Point itself. In general, the shorelines are gentle sloping, thus exposing them to seasonal and episodic inundation. These inundations, sheer size, and limited human encroachment and visitation make these wetlands important areas for amphibians and birds. In addition, the nature of the River and shoreline interaction lends itself to large concentrations of submerged and floating aquatic vegetation, also ideal habitat for resident fish species.

As the Chadakoin River passes McCrea Point it enters a highly commercial and industrial area with narrow riparian buffers and varying degrees of river walls. Throughout the remainder of the LWRP Study Area buffers typically range from 0 to 25 feet wide with few exceptions. Concrete and stone walls, gabions, bulkheads, and building foundations dominate shorelines. There is minimal floodplain interaction within this reach as the River is channelized in most instances below the adjacent land. This disconnect appears to be impacting nesting turtles as they must concentrate nesting sites in the limited areas with floodplain access, which in many cases are industrial areas. It was observed by Biohabitats staff that invasive and pioneer species more adapted to disturbed conditions dominate the riparian vegetation in this section of the Study Area. Buffer canopies are typically limited to one to two tree widths, thus providing minimal ecological benefits.

Based on these observations, an opportunity exists to enhance the shoreline and upland areas, and enhance and stabilize the riverside trail interface with the native River shoreline. Such actions include:

1. Give priority in the expenditure of public funds to actions that will protect and restore the Chadakoin River shoreline.

2. Create riparian transition zones where appropriate in the **Chadakoin Outlet District**, **Industrial Heritage Corridor**, and the **East End Industrial Corridor**. These areas will act as a transition between the River and the upland, and may include trails and other access as well riparian buffers. A riparian buffer is a permanent naturally vegetated area located adjacent to a stream, river, lake, pond or wetland. Riparian buffers provide important habitat and

shelter for native aquatic and terrestrial wildlife, capture and filter stormwater runoff, and serve as "rights-of-way" for dynamic stream and river systems. Their conservation and protection is critical to watershed health and management. In dense urban areas like downtown Jamestown, the design of riparian buffers may vary due to a variety of constraints, such as property ownership, existing development and infrastructure and economic development concerns. In these areas, every effort should be made to integrate living infrastructure into the urban landscape within the riparian transition zones to provide habitat, stormwater runoff treatment, and river protection. Where possible, an enhanced wooded (vegetation only) transition zone is the preferred approach.

3. Various types of plantings, river stabilization, facilities and furnishings dot the Riverwalk leading to some inconsistency of styles, vegetation health, shoreline function, and habitat value.
    a. The City has expressed a desire for greater hardscaping within the **Downtown District** and riparian transition zones where appropriate in the **Chadakoin Outlet District**, **Industrial Heritage Corridor**, and the **East End Industrial Corridor**, as described in Policy 6.4.2.
    b. Turf should be limited to selected areas where picnicking and active use might be desired.
    c. Increase the areas of wooded shoreline.
    d. Enhance the shoreline through the design for overall ecological function but with some accessibility to the River's edge for pedestrians.
    e. Diversify and expand the overall the vegetation palette to include denser plantings of native species and to provide better shoreline stabilization for the river with a more natural approach.

4. Where feasible, vacant lands and shoreline areas should be used to create broader shoreline buffers.

5. Shoreline restoration should occur where there is evidence of erosion or need for stabilization.

6. Aquatic habitat should be improved to increase recreational fishing opportunities through the creation of living shorelines and incorporating fishing friendly structures to existing bulkheads.
    a. Living shorelines, which use native plants, including grasses, trees and shrubs to provide stabilization while also adding beauty and habitat should replace riprapped, bulkheaded, mown, and eroding streambanks.
    b. Fishing access areas could also be incorporated into the living shorelines.
    c. Where bulkheads are to remain, living seawall habitats techniques, such as steel/mesh baskets, can be anchored to the structure and planted with submerged or emergent vegetation to provide cover and support an invertebrate food base for fish.

d. Turtle nesting areas should be created where appropriate in the **Chadakoin Outlet District**, **Industrial Heritage Corridor**, and the **East End Industrial Corridor**.

7. Pockets for fishing and kayak/canoe access could be incorporated into the native plantings and additional plantings could be used to screen adjacent industrial and business activities from the River.

8. Encourage the following actions in each of the ecological priority nodes (as identified in Supporting Document 2: Ecological Conditions and Living Infrastructure Framework document):
    a. Chadakoin Park and Wetland/Marsh complex – combination of habitat enhancement, restoration, and active recreation with the potential inclusion of an environmental education center.
    b. McCrea Point – living shoreline restoration and stormwater management as needed.
    c. Panzarella Point and BPU site – shoreline restoration, stormwater management, native plant enhancement.
    d. Harrison Street to Foote Avenue permaculture/urban agriculture – productive and participatory landscapes that invite urban gardeners to help shape the landscape and enhance the riparian buffer with a series of gardens.
    e. Gateway Center (31 Water Street) habitat restoration and stewardship zone – shoreline restoration and impervious cover removal, with the potential for stewardship opportunities, productive landscapes partnered with the food bank within the Gateway Center facility, and green jobs training.
    f. Dahlstrom site river restoration node – restoration of riparian area floodplain and shoreline.
    g. Hope Windows to Bigelow Street to floodplain and upland park zone – management and enhancement of shoreline and floodplain, broadening connections of nature trail, creating new open space access areas and strengthening ecological character of river buffer, integrated stormwater management in parking lots with continued use.

POLICY 6.5:

Encourage community awareness and stewardship of natural resources along the waterfront through the support of community activities.

The waterfront is a significant asset for the City of Jamestown, and efforts should be made to enhance its visibility throughout the City. Efforts to increase awareness of the River should include:

1. Expanding the Riverwalk and increasing access opportunities.

2. Holding waterfront community events such as concerts and festivals to draw people to the waterfront.

3. Fostering the development of additional amenities and waterfront-related uses that bring additional visitors to the waterfront.

4. Creating educational and historical signage along accessible areas of the River

5. Completing annual River cleanup activities that are widely advertised.

POLICY 7:

Protect and improve air quality in the City of Jamestown's Waterfront Revitalization Area.

This policy provides for protection of the City of Jamestown from air pollution generated within the waterfront area or from outside the waterfront area which adversely affects the region's air quality. This is achieved through enforcement of State and Federal air quality standards and permit requirements.

POLICY 7.1:

Minimize existing air pollution and prevent new air pollution within the City of Jamestown's Waterfront Revitalization Area.

New land uses and development in the City of Jamestown should comply with the following:

1. Limit pollution resulting from new or existing stationary air contamination sources consistent with:
    a. Attainment or maintenance of any applicable air quality standards,
    b. Applicable New Source Performance Standards,
    c. Applicable control strategy of the State Implementation Plan, and
    d. Applicable Prevention of Significant Deterioration requirements.

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

3. Limit pollution resulting from vehicle or vessel movement or operation.

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

POLICY 7.2:

Minimize discharges of atmospheric radioactive material sources to levels that are low as practicable.

State air quality standards regulate radioactive materials and pollutants. For actions with a potential impact on air quality, the City shall provide necessary information, as appropriate, to the State to enable the effective administration of air quality statutes pertaining to atmospheric radioactive material.

POLICY 7.3:

Assist the State whenever possible in the administration of its air quality statutes pertaining to chlorofluorocarbon compounds and to the atmospheric deposition of pollutants in the region, particularly from nitrogen sources.

State air quality standards regulate chlorofluorocarbon pollutants and nitrogen pollution. For actions with a potential impact on air quality, the City shall assist the State, whenever possible, in the administration of its air quality statutes pertaining to chlorofluorocarbon compounds and to the atmospheric deposition of pollutants in the region, particularly nitrogen sources.

POLICY 8:

Minimize environmental degradation in the City of Jamestown's Waterfront Revitalization Area from solid waste and hazardous substances and wastes.

The intent of this policy is to protect people from sources of contamination and to protect the waterfront resources of the City of Jamestown from degradation through proper control and management of wastes and hazardous materials. Attention is also required to identify and address sources of soil and water contamination resulting from landfill and hazardous waste sites in the City of Jamestown.

1. As part of the City's overall economic development approach, brownfield sites should be addressed via the following:
    a. Identifying potentially contaminated brownfield sites throughout the Study Area.
    b. Prioritizing the sites based on redevelopment potential, geographic location, site features, and/or potential for exposure.
    c. When possible and appropriate, working with property owners, developers, and regulators to address contamination issues within the Study Area.

d. Obtaining funding to inventory, assess, and/or remediate brownfield sites.

POLICY 8.1:

Manage solid waste to protect public health and control pollution.

1. Plan for proper and effective solid waste disposal prior to undertaking major development or redevelopment activities that generate solid wastes.

2. Manage solid waste by:
    a. Reducing the amount of solid waste generated.
    b. Reusing or recycling material.
    c. Using land burial or other approved methods to dispose of solid waste that is not otherwise being reused or recycled.

3. Prevent the discharge of solid wastes into the City environment and River water by using proper handling, storage, management, and transportation practices.

4. Operate solid waste management facilities to prevent or reduce water, air, and noise pollution and other conditions harmful to the public health.

POLICY 8.2:

Manage hazardous wastes to protect public health and control pollution.

1. Manage hazardous waste in accordance with the following priorities:
    a. Eliminate or reduce generation of hazardous wastes to the maximum extent practicable.
    b. Recover, reuse, or recycle remaining hazardous wastes to the maximum extent practicable.
    c. Use detoxification, treatment, or destruction technologies to dispose of hazardous wastes that cannot be reduced, recovered, reused, or recycled.
    d. Where practical, phase out land disposal of industrial hazardous wastes.
    e. Prohibit the siting of any new facility that would generate significant quantities of hazardous wastes, or the disposal of any hazardous wastes within the waterfront area.

2. Ensure maximum public safety through proper management of industrial hazardous waste treatment, storage, and disposal.

POLICY 8.3:

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

1. Prevent release of toxic pollutants or substances hazardous to the environment that would have a deleterious effect on fish and wildlife resources and human health.

2. Prevent environmental degradation due to persistent toxic pollutants by:
    a. Limiting discharge of bioaccumulative substances
    b. Avoiding resuspension of toxic pollutants and hazardous substances and wastes, and avoiding reentry of bioaccumulative substances into the food chain from existing sources.

3. Prevent and control environmental pollution due to radioactive materials.

4. Protect public health, public and private property, and fish and wildlife from inappropriate use of pesticides.
    a. Limit use of pesticides to effectively target actual pest populations as indicated through integrated pest management methods.
    b. Prevent direct or indirect entry of pesticides into waterways.
    c. Minimize exposure of people, fish, and wildlife to pesticides.

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

6. Remediate sites containing toxic pollutants and substances hazardous to the environment and public health.

POLICY 8.4:

Prevent and remediate discharge of petroleum products.

The handling of petroleum products near water bodies must be undertaken with utmost care. The following standards should be applied in the City of Jamestown:

1. Minimize adverse impacts from potential oil spills by appropriate siting of petroleum storage and distribution facilities.

2. Demonstrate that adequate plans for prevention and control of petroleum discharges are in place at any significant petroleum-related facility.

3. Prevent discharges of petroleum products by following methods approved for handling and storage of petroleum products and by using approved design and maintenance principles for storage facilities.

4. Clean up and remove any petroleum discharge that occurs in the waterfront area or River waters giving first priority to minimizing environmental damage.

5. Undertake clean-up and removal activities in accordance with the guidelines and procedures contained in the New York State Water Quality Accident Contingency Plan and Handbook giving first priority to minimizing environmental damage.

POLICY 8.5:

Transport solid waste and hazardous substances and waste in a manner which protects the safety, well being, and general welfare of the public; the environmental resources of the state; and the continued use of transportation facilities.

Transportation of solid waste and hazardous substances and waste shall be conducted using routes and methods that protect the safety, well-being, and general welfare of the public and the environment. Other than the residential and/or commercial collection of municipal solid waste, local streets and highways shall be avoided unless absolutely necessary. Preferred routes shall consist of the interstate highway and rail systems.

POLICY 8.6:

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

1. Solid and hazardous waste facilities, including automobile scrap facilities, are not considered as appropriate uses for the waterfront and the siting of such uses in this area should be prohibited.
    a. Where such facilities currently exist within the waterfront area, the City should work with the owners to identify a more appropriate location within the City that is consistent with that type of land use.

2. If the need for a waterfront location is demonstrated, preclude impairment of waterfront resources from solid and hazardous waste facilities by siting these facilities so that they are not located in or would not adversely affect:
    a. Natural protective feature areas
    b. Surface waters, primary water supply, or principal aquifers
    c. Habitats critical to vulnerable fish and wildlife species, vulnerable plant species, and rare ecological communities
    d. Wetlands

3.3 PUBLIC WATERFRONT POLICIES

POLICY 9:

Provide for public access to, and recreational use of, the Chadakoin River, public lands, and public resources within the City of Jamestown's Waterfront Revitalization Area.

Along many stretches of the Chadakoin River, physical and visual access to the waterfront and surface waters is limited for the general public. With the exception of Jones Memorial Park, Chadakoin Park, McCrea Point, Panzarella Park, Keelboat Landing, and Riverwalk, the majority of the parcels fronting the River are privately owned. Furthermore, physical limitations due to steep slopes have also limited access to the shoreline.

Given the length of the Chadakoin River shoreline, the existing public access opportunities are not adequate. Through wise placement of additional access points and appropriate development methods, new opportunities can be created for the public to fully appreciate the area's vast waterfront resources.

This policy incorporates measures needed to improve public access and recreational opportunities along the River shoreline. In some cases, existing facilities need only to be enhanced or linked with other sites. Together, the public access projects described in Section IV of this Report provide a comprehensive system to address the needs of residents and visitors to the City. The following policies, along with the proposed projects, address the issues of public access and scenic impacts.

POLICY 9.1:

Promote appropriate and adequate physical public access and recreation throughout the City of Jamestown's Waterfront Revitalization Area.

The lack of public access to waterfront lands along the Chadakoin River has prompted the identification of many of the projects described in Section IV of this Report.

Public access and recreation facilities can generate revenue in a community and also help attract tourists, both goals identified by the community during the preparation of this LWRP. Potential spin-off benefits can be realized in terms of retail businesses, hotels or restaurants. Besides making the area more attractive for visitors, waterfront access also enhances the quality of life for area residents.

When possible, waterfront land should be kept in public ownership through a lease arrangement. If private non-water-related uses do locate in this area, physical public access to the waterfront should be included in the development.

Several locations where public access and/or recreational amenities could be developed are identified in the standards below, which shall be used as a guide for the City in making future development decisions.

1. Promote the extension of the Riverwalk Trail system, which acts as an attraction and as links to neighborhoods.

2. Promote the creation of programmed activity areas along the waterfront.

3. Provide a transportation network that unites the City of Jamestown's Waterfront Revitalization Area by developing integrated vehicular parking and access points to the Riverwalk. Interpretive nodes, picnic areas, viewing locations and active recreation nodes should be developed along the entire waterfront.

4. Promote the location of small craft boat launches and other water-based recreational uses where feasible.

5. Limit the construction of private, non-water-related commercial uses in order to preserve the waterfront as a destination and tourist attraction.

6. Protect and maintain existing public access and recreation facilities in the City of Jamestown's Waterfront Revitalization Area.

7. Where possible, provide for public access at streets terminating at or near the shoreline.

8. Promote an increased level of access at existing public waterfront areas where the need has been identified.

9. Promote the use of "conservation" easements in environmentally sensitive areas in the City of Jamestown's Waterfront Revitalization Area (also discussed in Policy 9.5).

POLICY 9.2:

Provide public visual access from public lands to the Chadakoin River and adjacent shoreline open spaces / natural areas at all sites where physically practical and ecologically sustainable.

The City of Jamestown's Waterfront Revitalization Area offers diverse topography that affords spectacular views of this area of the City. Most views are obstructed or

partially obstructed at some locations by structures, woods or vegetation. Creating more opportunities for public visual access is important to allow full appreciation of the beauty and resources of the area, and to increase the attractiveness of the waterfront area for residents and tourists alike.

1. Prevent the loss of existing visual access by limiting the scale, design, location or structures of development or activities.

2. Protect view corridors provided by streets and other public areas leading to the waterfront.

3. Allow vegetative or structural screening of an industrial or commercial waterfront site if the resulting improvement in overall visual quality outweighs the loss of visual access.

4. Increase the visual access to the waterfront whenever practical by providing turnoffs, interpretive exhibits or informational kiosks.

5. Minimize access points through sensitive areas to promote ecological function and avoid further fragmentation of natural resource lands.

POLICY 9.3:

Preserve public interest in and use of lands and waters held in public trust by the State and other governmental entities.

Coordinate efforts for waterfront interaction and preservation with other governmental agencies through joint venture efforts resulting in active and passive recreation projects as discussed in Section IV of this Report. General standards to implement this policy are as follows:

1. Limit grants and leases, and easements regarding lands underwater in accordance with an assessment of potential adverse environmental impacts of the proposed use or structure. Use the following factors in assessing potential adverse impacts:

    - Environmental impact
    - Values of the natural resource
    - Size, character, and effect of transfer on neighboring uses
    - Effect of transfer on natural resources
    - Water dependent nature of the use
    - Adverse economic impact
    - Consistency with public interest

2. Limit transfer of interest in public trust lands to the minimum necessary.

3. Grants in fee of underwater lands are limited to exceptional uses.

4. Retain a public interest in the transfer of interest in underwater lands which will be adequate to preserve public access and recreation opportunities.

5. Private uses or structures on underwater lands should be limited to entities that have a riparian interest and are water-dependent.

6. Avoid substantial loss of public interest in public trust lands by assessing the cumulative impact of individual grants, easements, and leases.

POLICY 9.4:

Provide access and recreation opportunities that are compatible with the City of Jamestown's Waterfront Revitalization Area's natural resources.

The following guidelines provide standards by which the City can assess the potential for adverse environmental effects on new access and recreation projects in the Waterfront Revitalization Area.

1. Provide appropriate access and recreational activity in the **Lake Outlet District**, **Industrial Heritage Corridor**, and **East End Industrial Corridor** that will avoid adverse impacts on natural resources. The following factors shall be used in determining the potential for adverse environmental effects:
    a. Intensity of the associated activity
    b. Level of likely disturbance associated with the proposed activity. The following types of activities are listed in order of most potential for disturbance to least potential:

        - Motorized activities
        - Active, non-motorized activities, including water-dependent and water-related uses
        - Passive activities
        - Avoidance of the area
        - Sensitivity of the natural resources involved and the extent of the ecological benefits associated with avoidance of the area

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

3. Establish appropriate seasonal limitations on access and recreation where necessary to minimize adverse environmental impacts.

4. Provide educational, interpretive, research and passive uses of natural resources through appropriate design and control of public access and recreation.

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

6. Provide access using methods and structures which maintain and protect open space areas associated with natural resources.

7. Where appropriate, promote the development of additional trails through the wetland area at the Chautauqua Lake Outlet for nature interpretation and for recreational use of fish and wildlife resources.

8. Consider the development of pedestrian and bicycle trails along the waterfront to foster public appreciation of this resource.

POLICY 9.5:

Where feasible, utilize conservation easements to provide public access and greenway trail development along the waterfront.

The use of conservation easements has been growing in popularity, as communities attempt to increase access to waterfronts and other natural areas of interest. The policy entails:

1. The City will work to obtain conservation easements at tax delinquent properties following foreclosure.

2. The City will work to form partnerships with private property owners in areas in which a high priority has been identified for the extension of trails, the creation of improved waterfront amenities, and/or the restoration of shoreline.

3. The City may purchase waterfront property with the intent of creating public access and/or greenway trails.

POLICY 9.6:

Connect important open space assets to each other and to the surrounding neighborhoods.

Proposed projects within the LWRP Study Area will preserve and improve connections to important open space assets. A trail system has been developed in the City and expansion of the trail network is planned. Connecting the trail system

to the downtown, surrounding neighborhoods, parks as well as significant open space areas has wide public support and is an important community goal.

The waterfront trail system (Riverwalk) will run along the water's edge to the maximum extent practicable. Trails will be designed to accommodate appropriate forms of non-motorized transportation in a safe and attractive manner. As public investments are made in the waterfront area, the trail will be improved as necessary and appropriate to accommodate the variety of users.

Where new development is created along the River, provisions for public access to the River should be incorporated within the design of the site. Such provisions should allow for pedestrian corridors and other design elements consistent with the linear park nature of the River corridor. Design elements may include the construction of impervious paths, boardwalks, the introduction of plantings, benches, trash receptacles and bike racks, or other design elements as appropriate. Vehicular access, with the exception of emergency vehicles should be prohibited on the trail and any drop-off points should be set well back from the River's edge. The incorporation of parks and other green spaces, pedestrian access and trails, within any new development should be encouraged.

3.4 WORKING WATERFRONT POLICIES

POLICY 10:

Protect the City of Jamestown's water-dependent uses and promote siting of new water-dependent uses in suitable locations.

Waterfront activity in the City of Jamestown has traditionally concentrated along the Chadakoin River to make use of the water power and clean water for other industrial uses. However, the City's industries no longer utilize the River, and the opportunity exists to re-vision the City's waterfront. The intent of this policy is to protect existing and promote the siting of new water-dependent uses along the River waterfront by ensuring adequate provision of infrastructure for their efficient and orderly operation. This policy is also intended to address the management of conflicts, congestion and competition for space in the use of the waterfront and its adjoining surface waters.

Many water-dependent uses often include and are supported by other uses that are complementary and supportive to the water-dependent use and do not impair the ability to water-dependent uses to function. The water-enhanced uses often provide beneficial support to the primary use, as well as convenience for users. Standards for the siting of water-enhanced uses are also established below.

POLICY 10.1:

Protect existing water-dependent uses.

Water-dependent uses are activities which require a location in, on, over, or adjacent to the water because the activities require direct access to water and the use of water is an integral part of the activity. Due to the area's history, very few water-dependent uses now occur on the Jamestown's waterfront. Existing water-dependent uses along the Chadakoin River include fishing, boat launches, public boat docking, and the Fire Training Center. Actions that would adversely impact or interfere with these and other water-dependent uses should be avoided.

New development proposals on and near the Chadakoin River should consider the impact of this new development on existing water-dependent uses, including:

1. Impacts to existing water-dependent uses should be avoided.

2. When impacts to water-dependent uses cannot be avoided, mitigation measures should be implemented, which may include replacement of water-dependent uses or enhancement of other, existing water-dependent uses.

POLICY 10.2:

Promote the siting of new water-dependent uses at suitable locations.

Although the number of sites suitable for development or redevelopment for water-dependent uses along the Chadakoin River are limited due to the shallow depth of the River, the relatively narrow width of the River, the steep topography along certain stretches of the shoreline, existing development, and the vast amounts of land that are publicly owned and/or protected due to environmental reasons, opportunities do exist for additional water-dependent uses. These new water-dependent uses should be located within developed areas that already contain concentrations of water-dependent and water-enhanced commercial and recreational uses and essential support facilities.

Water-dependent uses should be discouraged from undeveloped areas unless there is a demonstrated demand for the use, the use has unique locational requirements that necessitate a particular site, or the use is of a small scale and is consistent with the character of the area.

Careful review of each project is required to ensure the development does not adversely impact the natural environment, existing communities or scenic or aesthetic resources. The following items apply to the development of new water-dependent uses:

1. Encourage the location of new water-dependent development throughout the City, especially within the **Chadakoin Outlet District** and the **Downtown District**. However, this development should not fragment the habitat within the **Chadakoin Outlet District**, which contains a large proportion of sensitive lands.

2. Seek to attract a mix of unique, water-dependent uses that increase economic activity in the **Downtown District**.

3. Seek to attract a mix of unique, water-dependent uses that increase recreational activity throughout the City, especially in the **Chadakoin Outlet District**.

4. Ensure waterside and landside access, as well as upland space for parking and other facilities, is adequate.

5. Evaluate whether the necessary infrastructure exists or is easily accessible.

6. Promote standards to make beneficial use of the site's waterfront location, as outlined in Policy 1.2.

7. Create unique, water-dependent uses that increase the activity at appropriate sites along the waterfront while not harming the existing fish and wildlife habitats.

POLICY 10.3:

Allow water-enhanced uses in the City of Jamestown's Waterfront Revitalization Area that complements or improves the viability of water-dependent uses.

Water-enhanced uses are defined as activities that do not require a location on or adjacent to the water to function, but whose location on the waterfront could add to public enjoyment and use of the water's edge, if properly designed and sited. Water enhanced uses are generally of a recreational, cultural, commercial or retail nature. Existing water-enhanced uses along the Chadakoin River include Jones Memorial Park, Panzarella Park, Keelboat Landing, and the Riverwalk.

Actions that would adversely impact or interfere with these and other water-enhanced uses (other than the siting of a new water-dependent use) should be avoided. When determining if a water-enhanced use is appropriate for siting along a waterfront, the following factors should be considered:

1. The use would provide an economic incentive to prevent the loss of a water-dependent use.

2. The use would be sited and operated so as not to interfere with water-dependent uses.

3. The use would complement a water-dependent use.

4. The use would be sited in a manner that does not preclude future expansion of a water-dependent use.

5. The activity makes beneficial use of a shoreline location through siting and design to increase public enjoyment of the waterfront, improve the economic viability of the area, and enhance community character.

6. The use would be sited and operated so as to not interfere with public access along the water's edge.

7. The use will be protective of fish and wildlife habitat and water quality.

POLICY 10.4:

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

1. Site new and expand existing water-dependent uses where there is:
    a. Adequate upland for support facilities and services
    b. Sufficient waterside and landside access
    c. Appropriate nearshore depth to minimize dredging
    d. Suitable water quality classification
    e. Minimization of effects on wetlands and wildlife habitat

2. Maintain regionally important water-dependent uses and facilities.

POLICY 10.5:

Provide sufficient infrastructure for water-dependent uses.

The following factors should be considered when evaluating infrastructure related to the waterfront:

1. Evaluate the capacity and condition of infrastructure where water-dependent uses are planned

2. Identify areas in which capacity and/or condition of infrastructure is insufficient for proposed development

3. Seek funding for infrastructure upgrades as appropriate

4. Incorporate long-term development plans into regular infrastructure maintenance and upgrade actions

POLICY 11:

Promote sustainable use of living freshwater resources within the City of Jamestown's Waterfront Revitalization Area.

Recent fisheries reports for the Chadakoin River are not available, but limited data on sportfish in Chautauqua Lake is available and many sportfish are taken from the Lake. It can be assumed that a number of these fish also inhabit the Lake outlet, which is similar to the habitat of the lake, and within the Chadakoin River. Although commercial fishing plays no role in the local economy, recreational fishing is growing substantially in popularity as public access to areas along the riverfront increase.

Continued use of living marine resources depends on maintaining long-term health and abundance of fisheries resources and their habitats in the Chadakoin River. This requires active management of fisheries, protection and conservation of habitat, and maintenance of water quality at a level that will foster occurrence and abundance of these resources. Allocation and use of available resources must be consistent with the restoration and maintenance of healthy stocks and habitats that maximize the benefits of resource use so as to provide valuable recreational experiences and sustainable ecological resources.

POLICY 11.1:

Ensure the long-term maintenance and health of fishing resources in the Chadakoin River.

1. Ensure that recreational use of fish resources are managed in a manner that:
    a. Places primary importance on maintaining the long-term health and abundance of fisheries.
    b. Results in sustained useable abundance and diversity of the resource.
    c. Does not interfere with population and maintenance and restoration efforts.
    d. Uses best available scientific information in managing the resources.

2. Protect and manage native stocks and restore sustainable populations of indigenous fish and wildlife species.

3. Foster occurrence and abundance of fishing resources through the protection of spawning grounds, river and shoreline habitats, and water quality.

POLICY 11.2:

Promote recreational use of the Chadakoin River fisheries.

The intent of this policy is to promote and enhance important recreational fishing in the City of Jamestown by:

1. Providing adequate infrastructure to meet recreational needs, including appropriate fishing piers, dockage and parking.

POLICY 12:

Protect agricultural lands within the City of Jamestown's Waterfront Revitalization Area.

The intent of this policy is to conserve and protect important agricultural uses in the City of Jamestown by preventing the conversion of prime farmland to other uses and protecting existing and potential agricultural production.

While agriculture is still considered an important part of the economy of many of the surrounding communities, the City of Jamestown contains no farmland or farming operations. Therefore, Policy 12 is not applicable.

POLICY 13:

Promote appropriate use and development of energy and mineral resources within the City of Jamestown's Waterfront Revitalization Area.

The intent of this policy is to foster the conservation of energy resources in the City of Jamestown's Waterfront Revitalization Area by seeking alternative energy sources, providing for standards to ensure maximum efficiency and minimum environmental impacts when siting energy facilities, minimizing the impact of fuel storage facilities and addressing mineral extraction.

POLICY 13.1:

Conserve energy resources and promote alternative energy sources that are self-sustaining, including solar powered energy generation.

The conservation of energy should be an important part of prudent future planning. Energy efficiency can be achieved through several means that fall under the jurisdiction of local governments, including:

1. Promoting the increased use of public transportation (such as the Chautauqua Area Rural Transit System [CARTS]) to the extent feasible.

2. Providing for pedestrian and bicycle modes of transportation and their integration into the larger transportation system.

3. Promoting energy efficient design in new developments.

4. Promoting greater energy efficiency when upgrading public facilities.

POLICY 13.2:

Minimize impacts from new energy generation and transmission development within the City of Jamestown's Waterfront Revitalization Area.

The Waterfront Revitalization Area already contains the Board of Public Utilities electrical generating plant. It is unlikely additional generation facilities would be sited within the Waterfront Revitalization Area.

However, if new energy generation and transmission developments are evaluated, the degradation of waterfront resources in the City of Jamestown's Waterfront Revitalization Area should be avoided by siting new energy generating and transmission facilities so they do not adversely affect:

1. Commercial and recreational fishing

2. Habitats critical to fish and wildlife species, vulnerable plant species, and rare ecological communities

3. Wetlands

4. Historic resources

5. Scenic resources

POLICY 13.3:

Minimize the adverse impacts from the storage of fuel products within the City of Jamestown's Waterfront Revitalization Area.

The following considerations were generally derived from Environmental Conservation Law, Article 23, Title 17 and from Federal Safety Standards, 40 CFR Part 193 and apply to the storage of fuel products within the Waterfront Revitalization Area:

1. Ensure that the production, storage and retention of petroleum products within the City of Jamestown's Waterfront Revitalization Area is done in accordance with State regulations.

2. Protect natural resources within the City of Jamestown's Waterfront Revitalization Area by complying with local, county and State oil spill contingency plans.

3. Because of the high potential for hazard associated with liquefied natural gas facilities, these facilities are considered inappropriate and would not provide significant public benefit along the City of Jamestown waterfront and, thus, such uses should be discouraged in this area

POLICY 13.4:

Ensure that mining, excavation, and dredging do not cause an increase in erosion, or an adverse effect on natural resources.

This policy regulates mining, excavation and dredging activities in the City of Jamestown Waterfront Revitalization Area. Due to the disruptive nature of these activities and the environmental sensitivity of the area, caution must be exercised to ensure these activities do not adversely affect natural resources.

Mining is assumed to be an inappropriate use in the City of Jamestown Waterfront Revitalization Area, along the waterfront in particular. Factors to be used in determining the appropriateness of mining operations include:

1. Compatibility with adjacent uses.

2. Loss of use of the site for other potential uses.

3. Alteration of waterfront geological landforms.

4. Adverse impacts on natural resources

5. Degradation of visual quality

Dredging may prove to be essential for waterfront revitalization and development in some areas. Dredging projects, however, may adversely affect water quality, fish and wildlife habitats, wetlands, and other important waterway resources. Often these adverse effects can be minimized through careful design and timing of the dredging operations and proper siting of the dredge spoil site. Dredging permits may be granted by the State if it has been satisfactorily demonstrated that these anticipated adverse effects have been reduced to levels, which satisfy dredging permit standards set forth in regulations developed pursuant to Environmental Conservation Law (Articles 15, 24, 25 and 34).

Dredging projects should consider:

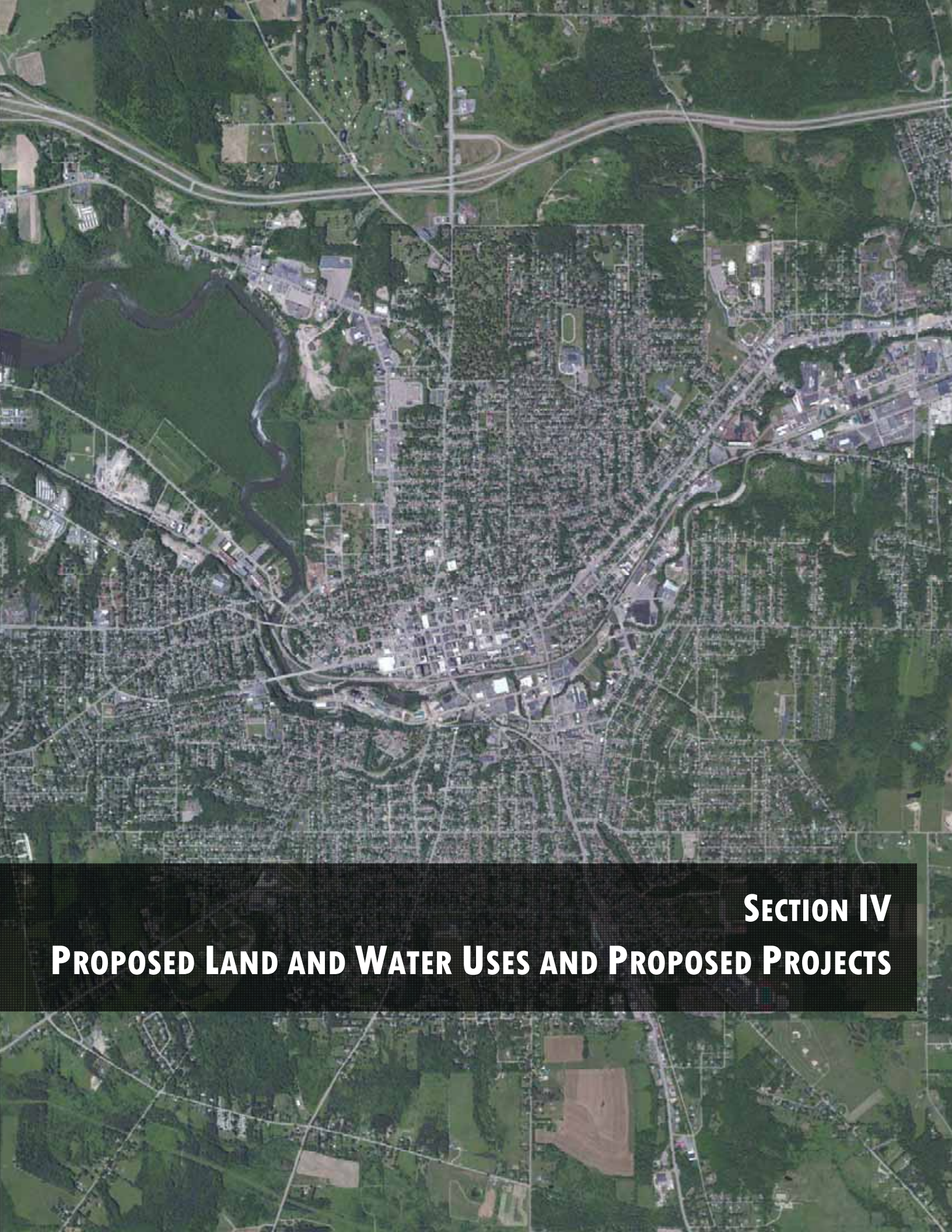
1. Whether the benefits outweigh the potential environmental impacts.

2. Safe operations that protect human health and the environment.

3. The eastern spiny softshell turtle, a Species of Significant Concern.

4. The proper handling and disposition of dredge spoils.

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Section IV
Proposed Land and Water Uses and Proposed Projects

SECTION IV – PROPOSED LAND AND WATER USES AND PROPOSED PROJECTS

This section of the LWRP describes and illustrates the proposed land and water uses for the City of Jamestown Waterfront Revitalization Area (Figure 21). Proposed projects are briefly described within the text and the Implementation Matrix (Table 22). Figures 22, 23, and 24 identify the locations of proposed projects within the LWRP Area.

4.1 PROPOSED LAND USES

The current and proposed land use patterns within the LWRP Study Area vary by sub-area. However, the land uses in the City of Jamestown Waterfront Revitalization Area are proposed in a manner that will continue the general patterns of existing development in the Study Area with some transitioning of inconsistent uses via market forces. Land use changes are proposed to protect waterfront resources, maintain the existing character of the community, and properly accommodate future development. Recommendations have been included to provide a continuous connection of multi-use trails to improve public access along the shoreline and to link the City with existing and proposed trails in adjoining communities. The objective is to allow the waterfront to be a viable segment in a regional trail system. The generalized land use recommendations shown in Figure 21 are intended to support the Local Waterfront Revitalization Program Policies contained in Section III.

The **Chadakoin Outlet District** sub-area will continue to contain a variety of land use patterns, including:

- Industrial uses adjacent to the railroad, with redevelopment of a number of the currently vacant and underutilized properties within the area.
- Green space proximal to the River and associated with Chadakoin Park, enhanced access to the River, an improved trail network, ecological preservation and enhancement, and new educational opportunities through the creation of a Nature and Educational Center.
- Commercial uses along Washington Street and Fluvanna Avenue, with in-fill development of underutilized and vacant properties.

Land use within the **Downtown District** sub-area will undergo the most significant change, as many of the current uses are not compatible with the vision for a vibrant waterfront with exceptional access, amenities, and programming that draw

significant numbers of people. In some cases, such as the Jamestown Cycle Shop, Friendly's Restaurant, and the Oriental Star Buffet, uses are compatible and should be expanded upon and encouraged. Where existing development is inconsistent, market forces will gradually encourage the inconsistent development to relocate to other, more appropriate areas of the City. Additional focus will be placed on development of the Medical Corridor concept (as discussed in further detail later in this section), and the results will include the conversion of underutilized sites to medical office space and other related uses.

Land uses in the **Industrial Heritage Corridor** will be modified slightly from existing conditions, where currently vacant and underutilized properties will be put back into productive use, primarily for commercial or industrial uses. Additionally, access to the River will be enhanced where appropriate to provide workers and residents alike the ability to enjoy the Riverfront.

The **East End Industrial Corridor** primarily consists of manufacturing facilities that are more modern and fully utilized. The few properties that are underutilized can be easily retrofitted for reuse and remain as industrial uses. Enhancements to the commercial and residential areas within this sub area could include improved access to the waterfront and ecological preservation and enhancement along the River corridor.

4.2 PROPOSED WATER USES / HARBOR MANAGEMENT

As discussed in Section 2.3, the Chadakoin River within the City of Jamestown Waterfront Revitalization Area is essentially comprised of two reaches with distinct characteristics. From the western boundary of the City to the Warner Dam, the River is broad, relatively deep, and slow moving. From the Warner Dam to the eastern City boundary, the River is more confined, shallow, and fast moving. Due to these differences, water uses in the two sections of the River are quite different.

In the western portion of the River, boating is a primary recreational use, at least to the Fairmount Avenue Bridge, under which access to boats is restricted due to the bridge's limited height. Additional bridges downstream of the Fairmount Avenue Bridge also are low and limit the potential for boating. Boating between the Lake Outlet and the Second Street Bridge is known to be a very scenic trip, and the speed limit is posted at five miles per hour.

McCrea Point Park contains a limited number of docks and slips, and a boat launch is available for public use. The Park is owned and operated by the City of Jamestown. A few private docks are located in this section of the River, and an informal boat launch is located at the foot of Clifton Avenue.

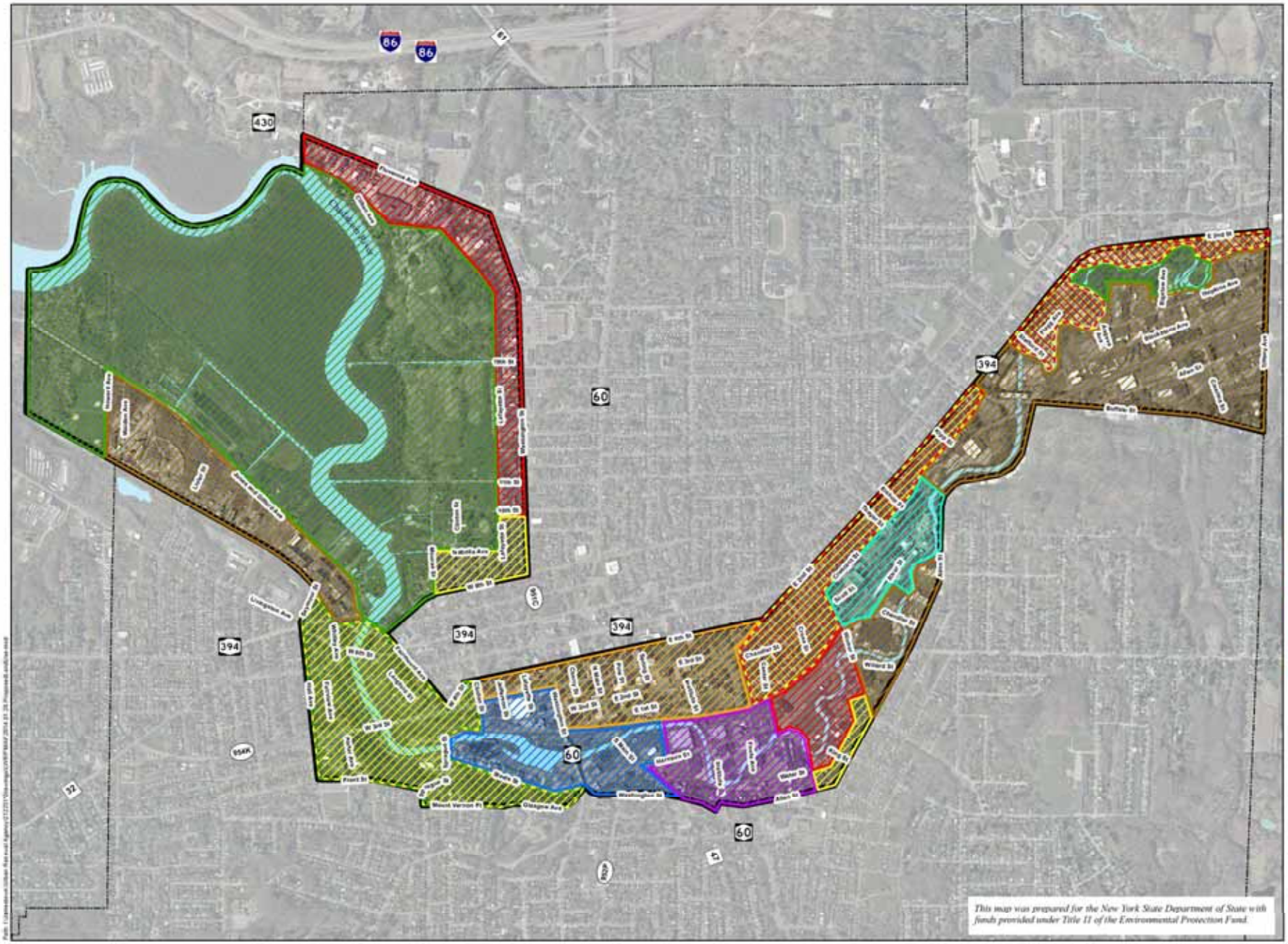


Figure 21. Generalized Land Use Recommendations Map

Fishing comprises the other primary recreational opportunity within the western section of the River. Fishing occurs primarily at McCrea Point and Panzarella Parks, the Riverwalk, and a number of informal access points. Only a small portion of the Riverwalk currently extends into the western section of the River. As the Riverwalk is expanded farther into the western section of the River, additional pedestrian and biking opportunities will be available, and additional formal fishing access points will be created.

The eastern portion of the River is too shallow for boating, and navigating with canoes and kayaks is challenged by the low bridges along the River's reach. Waterfront recreation in this section primarily consists of walking, biking, and fishing. The Riverwalk offers formal paths and fishing access, and any extension of the Riverwalk will increase opportunities for recreation. Conversion of vacant sites to greenspace would provide additional recreational opportunities and shoreline restoration could be integrated into such projects.

4.3 PROPOSED PROJECTS

A host of projects have been discussed in the City of Jamestown Waterfront Revitalization Area to improve opportunities for economic development, public access, and recreation. A key focus of the City's waterfront revitalization strategy is to take advantage of the recreational tourism potential of the waterfront. To this end, projects proposed for the area should be oriented around improving and increasing the public's ability to access and utilize local surface waters and providing additional recreational amenities along the waterfront. These projects will result in the gradual transition of properties with inconsistent uses to those with uses consistent with the waterfront concepts presented in this document, and, in the long-term, ultimately result in the transformation of the Study Area into a vibrant waterfront. These projects are based on the community's vision for revitalization of the Study Area, existing plans, and the various analyses presented within this document that are contained in the Supporting Documents portion of this report, including:

1. Economic and Market Analysis
2. Ecological Conditions and Living Infrastructure Framework
3. Urban Design Analysis

Figures 22, 23, and 24 identify the locations of proposed projects within the Study Area while the Implementation Matrix (Table 22) provides leader, partner, funding, priority, and time frame information about each of the proposed projects.