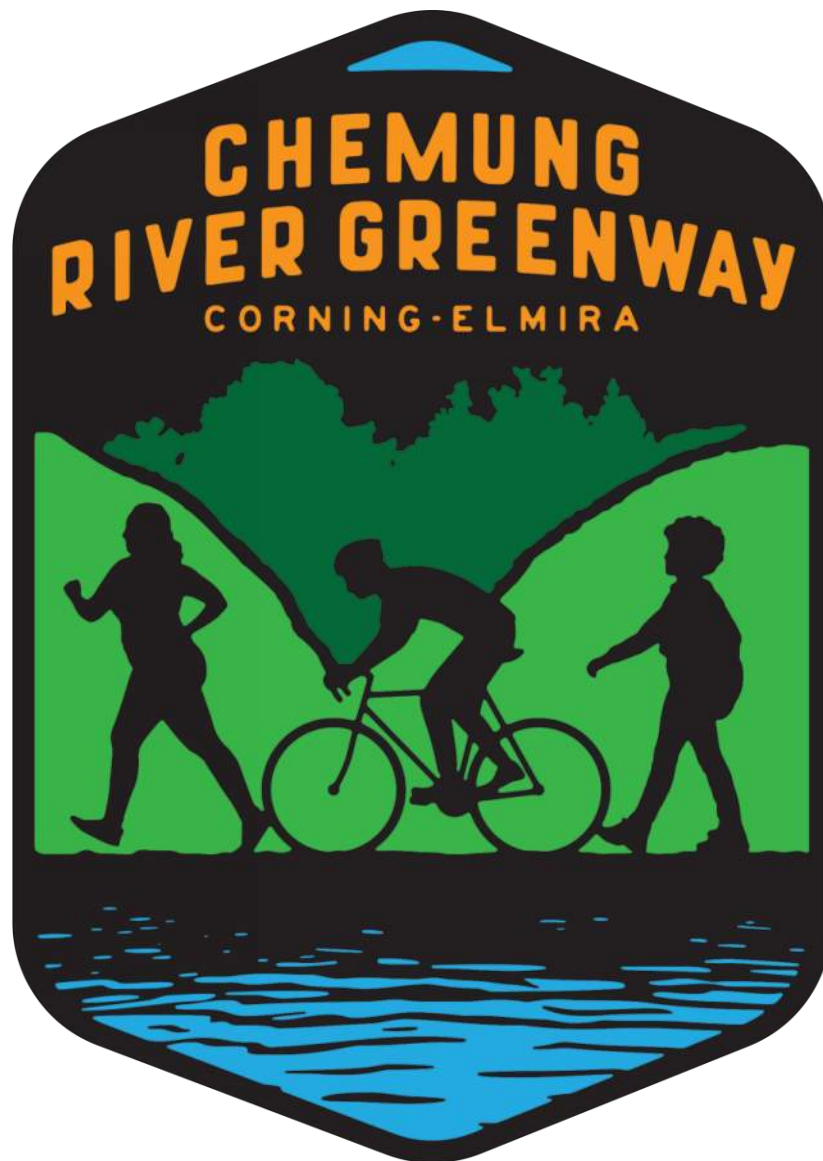




EXISTING CONDITIONS REPORT

Chemung River Greenway

Three Rivers Development Foundation



EXISTING CONDITIONS REPORT

Chemung River Greenway

Three Rivers Development Foundation
Steuben County, New York

March 2024



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TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	CHEMUNG RIVER GREENWAY BACKGROUND.....	2
2.1	Project Description.....	2
2.1.1	Purpose and Objectives.....	2
2.1.2	Project Description.....	2
2.1.3	Project Study Boundary Area	2
2.1.4	Mapping and Methodology.....	3
2.1.4.1	Mapping of Existing Conditions	3
2.1.4.2	Site Suitability Analysis.....	4
3.0	COMMUNITY PROFILE.....	5
3.1.1	Municipal Jurisdictions.....	5
3.1.2	Economic and Demographic Characteristics	6
3.1.3	Means of Transportation to Work.....	7
3.1.4	Benefits to Community	8
3.1.5	Regional Tourism Characteristics	8
3.1.6	Environmental Justice Areas	8
3.1.7	Disadvantaged Communities.....	8
3.1.8	Legislative Districts	9
3.2	EXISTING Conditions.....	9
3.2.1	History of the Region	9
3.2.2	Existing Trails and Recreational Resources.....	9
3.2.3	Linear Trails in Project Area	11
3.2.3.1	Catharine Valley Trail	11
3.2.3.2	Lackawanna Trail	12
3.2.3.3	Big Flats Trail - Sperr Memorial Park	13
3.2.3.4	Painted Post Trail.....	13
3.2.4	Public Land Holdings	14
3.2.4.1	The Nature Conservancy	14
3.2.4.2	Finger Lakes Land Trust	15
3.2.4.3	NYS DEC Wildlife Management Areas	15
3.2.5	Chemung River and Tributaries	15
3.2.5.1	Waterways.....	15
3.2.5.2	Floodways.....	16
3.2.5.3	Levees and Flood Control Structures.....	17
3.2.6	Steep Slopes and Valleys.....	18
3.2.7	Roadways	18
3.2.8	Traffic and Safety	19
3.2.9	Rail Infrastructure	20
3.2.9.1	Current Rail.....	20
3.2.9.2	Historic Rail (Trolley)	20
3.2.10	Environmental Conditions.....	20

4.0	POLICY AND ZONING ANALYSIS	21
4.1	RELATIONSHIP TO EXISTING REGIONAL PLANS	21
4.1.1	The Nature Conservancy Annual Report	21
4.1.2	New York State Open Space Conservation Plan	22
4.1.3	Conservation Focus Areas of the Upper Susquehanna Watershed within the Finger Lakes Land Trust's Service Area.....	23
4.1.4	Southern Tier Regional Economic Development Council Southern Tier Annual Report	24
4.1.5	Southern Tier Central Comprehensive Economic Development Strategy	24
4.1.6	Southern Tier Central Susquehanna-Chemung Action Plan	25
4.1.7	Economic Impact of Visitors in New York Finger Lakes Focus 2022	25
4.1.8	Chemung River Trail Assessment and Comprehensive Master Plan	25
4.1.9	Friends of the Chemung River Watershed Strategic Plan.....	25
4.1.10	Susquehanna Chemung Action Plan.....	26
4.1.11	Southern Finger Lakes Quality of Life Messaging	26
4.1.12	I86 Innovation Corridor Strategic Action Plan	27
4.2	RELATIONSHIP TO EXISTING REGIONAL MUNICIPAL PLANS.....	27
4.2.1	Chemung County Farmland Protection Plan	28
4.2.2	Steuben County Agricultural Development and Expansion Plan.....	28
4.2.3	Steuben County Agricultural and Farmland Protection Plan.....	28
4.2.4	Town of Big Flats Comprehensive Plan.....	29
4.2.5	Village of Horseheads Comprehensive Plan	29
4.2.6	City of Elmira Comprehensive Plan	31
4.2.7	Corning Parks Strategy	31
4.2.8	Elmira Chemung Bicycle Pedestrian Trail 2035 Plan	32
4.3	CONSIDERATION OF MUNICIPAL APPROVALS	33
4.3.1	General Municipal Law 239	33
4.4	HISTORIC AND ENVIRONMENTAL REVIEW POLICIES	35
4.4.1	State Environmental Quality Review.....	35
4.4.2	Department of Environmental Conservation Regional Environmental Permits	35
4.4.3	Department of Environmental Conservation Floodplain Management	35
4.4.4	State Historic Preservation Office	35
4.5	Policy and Zoning CONCLUSION	36
4.5.1	Social Capital.....	36
4.5.2	Regional Connectivity	36
4.5.3	Public Health.....	36
4.5.4	Economic Development	36
4.5.5	Tourism.....	37
5.0	STAKEHOLDER ENGAGEMENT	37
5.1	Stakeholder Survey	37
5.1.1	Stakeholder Survey Results	38
5.2	Stakeholder Conversations.....	39

5.3 Community Engagement 39

6.0 BEST PRACTICES.....39

6.1 Trail Benefits 39

6.1.1 Outdoor Recreation and Education 39

6.1.2 Health and Wellness 40

6.1.3 Workforce Attraction and Retention 40

6.1.4 Tourism and Economic 40

6.1.5 Environmental Conservation 41

6.1.6 Transportation and Safety 41

6.1.7 Equity..... 42

6.2 DESIGN FEATURES 43

6.2.1 Widths 43

6.2.2 Grades 44

6.2.3 Surface Materials 45

6.2.4 Barriers and Design Features 45

6.2.5 Bridges and Culverts 49

6.2.6 Roadway Crossings and Routes 50

7.0 NEXT STEPS.....52

LIST OF FIGURES

Figure 1: Chemung River Greenway Study Area 3

Figure 2: Chemung River Greenway Mapping Tool 4

Figure 3: Site Suitability Analysis - Low Slope Areas 5

Figure 4: Means of Transportation to Work, 2022 ACS 7

Figure 5: Project Area Linear Trails 11

Figure 6: Wineglass Marathon Route along Painted Post Trail 13

Figure 7: Typical shared use path section, 2017 Empire State Trail Design Guide, page 5-14 44

Figure 8: Drainage and Erosion Control, 2017 Empire State Trail Design Guide, page 5-30 45

Figure 9: Typical Trail Location at Utility Pole Guy-Wire, 2017 Empire State Trail Design Guide, page 5-17 46

Figure 10: Typical Trail Location at Relocated Guy-Wire, 2017 Empire State Trail Design Guide, page 5-17 46

Figure 11: Typical Shared Use Paths Along Canals, 2017 Empire State Trail Design Guide, page 5-18 47

Figure 12: Trail Edge Definition, 2017 Empire State Trail Design Guide, page 5-28 48

Figure 13: Bollard Alternatives, 2017 Empire State Trail Design Guide, page 5-34 48

Figure 14: Constrained Conditions, 2017 Empire State Trail Design Guide, page 5-69 49

Figure 15: Trail Bridges, 2017 Empire State Trail Design Guide, page 5-36 49

Figure 16: Marked and Signed Crosswalk, 2017 Empire State Trail Design Guide, page 5-44 50

Figure 17: Full Traffic Signal Crossing, 2017 Empire State Trail Design Guide, page 5-56 51

Figure 18: Grade Separated Crossings, 2017 Empire State Trail Design Guide, page 5-58 51

LIST OF TABLES

Table 1: Project Area Municipalities 6

Table 2: Project Area Demographic Conditions 6

Table 3: Project Area Legislative Districts 9

Table 4: Recreational Resources in Project Area10
Table 6: Municipal Land Use Boards in Project Area34
Table 7: Stakeholder Engagement Survey Responses Received37

LIST OF PHOTOGRAPHS

Photograph 1: Catharine Valley Trail, Watkins Glen12
Photograph 2: Lackawanna Trail, Elmira12
Photograph 3: Big Flats Trail, Town of Big Flats.....13
Photograph 4: Tanglewood Nature Center - Frenchman's Bluff14
Photograph 5: Steege Hill Nature Preserve15
Photograph 6: South Shore Chemung River, Conhocton Street, City of Corning17
Photograph 7: North Shore Chemung River, Grove Street, City of Elmira17

APPENDICES

- Appendix A: Project Location Maps
- Appendix B: Site Suitability Analysis
- Appendix C: Community Profile
- Appendix D: Existing Conditions Maps and Resources

1.0 EXECUTIVE SUMMARY

Three Rivers Development Foundation has selected LaBella Associates, PC to fulfill the requirements of a feasibility study for the potential development of a community-supported, multi-use trail connection between Steuben and Chemung Counties. This study was made possible through funding from the Appalachian Regional Commission. The plan will 1) evaluate benefits to health and well-being, safety, transportation, environment, public involvement, and economy, 2) identify existing conditions and best practices, 3) explore potential routes and connections, 4) provide recommendations and an implementation strategy.

Three Rivers Development Foundation is a subordinate organization under Three Rivers Development Corporation. Three Rivers Development Corporation is recognized as an effective private sector vehicle that leads, partners, collaborates and advocates for the three-county region of Steuben, Chemung and Schuyler counties in New York's Southern Tier. The mission of Three Rivers Development Corporation is "To facilitate and drive community and economic initiatives and collaborations that grow the regional economy and enhance the overall quality of life." In support of the mission, Three Rivers Development works with several area businesses, economic development groups, chambers of commerce, cities, municipalities, and more to realize synergies and achieve common goals. The Strategic Priorities include Workforce, Quality of Life, Infrastructure, and Businesses. Three Rivers caused to be created the Southern Finger Lakes Quality of Life Messaging report published May, 2021. The report states,

"For individuals interested in relocation and motivated by quality of life considerations, the Southern Finger Lakes is the place to be. Nestled in the hills and valleys of Upstate New York, The Southern Finger Lakes offers a relaxed pace of life, an environment that promotes a healthier mindset, lower housing costs and less time spent commuting, which means more time, energy and resources to prioritize what is really important. The Southern Finger Lakes is also a vacation destination, which means access to the same amazing experiences others travel for, are in your backyard everyday. The Southern Finger Lakes is ideally situated for those who want to be in proximity to large metropolitan areas, but live a life made far richer by connecting to nature and community, making a difference in the lives of their neighbors and taking advantage of the opportunity to develop a lifestyle that ideally suits who they are."

Three Rivers Development Corporation understands the long-standing regional desire for more recreational opportunities and the associated workforce recruitment and retention, and small scale economic impact, thus initiating the Chemung River Greenway project.

The Existing Conditions Report provides the foundation of the feasibility study and includes project background, community profile, policy and zoning analysis, early stakeholder engagement, and best practices for multi-use trail construction. This report will be followed by the Final Feasibility Study which will provide actionable recommended alternatives and implementation strategies.

2.0 CHEMUNG RIVER GREENWAY BACKGROUND

2.1 PROJECT DESCRIPTION

2.1.1 Purpose and Objectives

The purpose of the feasibility study is to guide decision making and future allocation of funding toward a proposed development of a multi-use trail between Corning and Elmira, NY. The feasibility study will evaluate the benefits to health and well-being, safety, transportation, environment, public involvement, and economy. It will identify existing conditions and best practices, explore potential routes, connections and costs, and it will provide recommendations and an implementation strategy.

2.1.2 Project Description

This study will evaluate the feasibility of a community-supported, multi-use trail connection between Corning and Elmira, NY. The proposed study will examine the benefits of an approximately 20-mile paved and single-track trail and targeted amenities along the Chemung River. The study will include:

1. Existing Conditions Report
 - a. Evaluating benefits to health and well-being, safety, transportation, environment, public involvement, and economy;
 - b. Identifying existing conditions and best practices;
2. Final Feasibility Study
 - a. Exploring potential alternative routes and connections; and
 - b. Providing recommendations and an implementation strategy.

The goal of the trail is to provide a continuous and safe multi-modal facility, expand upon existing regional trail networks, provide new alternative transportation opportunities for residents, businesses, and visitors, spur economic development, and improve the quality of life in Chemung and Steuben Counties.

2.1.3 Project Study Boundary Area

The feasibility study project boundary area is generally bounded on the west by the City of Corning, on the east by the City of Elmira, to the north by the I86 corridor, and to the south by the Chemung River. The Chemung River Greenway, project area follows the dominant feature in the region, the Chemung River. Please refer to Appendix A for Project Area Map.

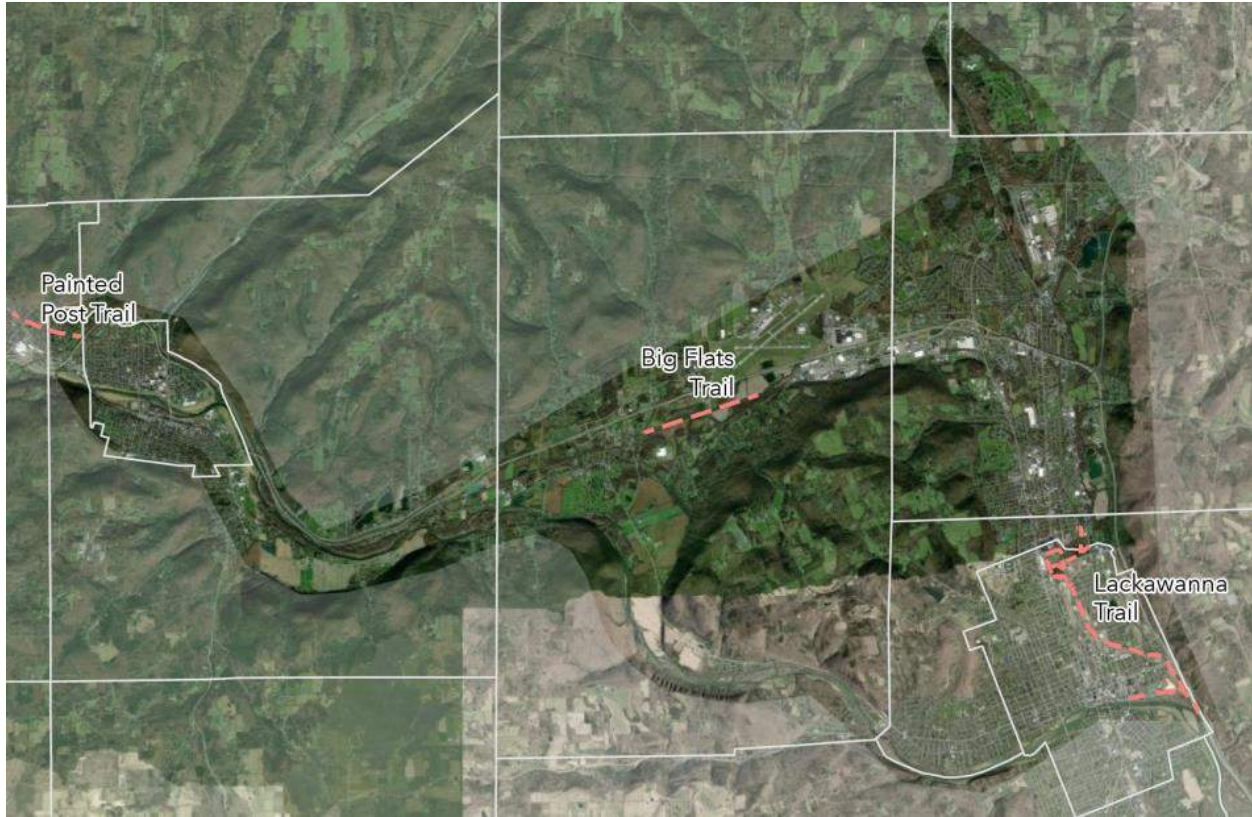


Figure 1: Chemung River Greenway Study Area

2.1.4 Mapping and Methodology

In addition to the trail mapping that was sourced from previous planning documents an extensive existing conditions GIS database was developed for the project. The database mapping includes existing conditions, existing trails, currently proposed trails, and newly proposed trails. This process generally included the following methodology:

2.1.4.1 Mapping of Existing Conditions

Numerous datasets from several organizations were utilized in this project to create the base data for planning of future trails. Most data were obtained from the NYS GIS Clearinghouse. These data layers were used in combination to both provide background representation on the maps, and to determine where there may be constraints for trail development, as well as conversely where trail development may be most feasible.

- Data from the Clearinghouse included NYSDEC wetlands, surface water, streams, roads, rail lines, ortho imagery and protected lands.
- Additional protected lands data were obtained from The Nature Conservancy, Finger Lakes Land Trust.
- Tax parcel data was obtained from Steuben and Chemung County.
- Additional wetland data was obtained from the USFWS.

- Elevation data was obtained from the USGS.
- Socioeconomic data, such as attractions, was manually collected via Google Maps and local knowledge.
- The Trolley Line data was manually created and informed by D.L. Miller & Co (1904)
- Trail and forest land data from Steuben County GIS
- Land cover and agricultural district data were obtained from Cornell University Geospatial Information Repository
- Zoning data and boat launch data provided by Southern Tier Central
- Levee data obtained from Esri US Federal Data via the Living Atlas
- Transportation, Building Footprints, Rivers and Streams data sourced through Esri Living Atlas
- Bike route data obtained from NYSDOT and NYS GIS Clearinghouse



Figure 2: Chemung River Greenway Mapping Tool

2.1.4.2 Site Suitability Analysis

In addition, LaBella performed a site suitability analysis for the Chemung River area. This involved ingesting relevant social and physical data layers, assigning them weights or value, and performing an overlay. The resultant map surface reflects areas of high and low value, corresponding with most to least suitable. This begets valuable information for potential trail corridors with consideration for both social and environmental constraints. Please refer to Appendix B for additional site suitability mapping including attractions, large parcels, and low slope areas.



Low Slope Areas

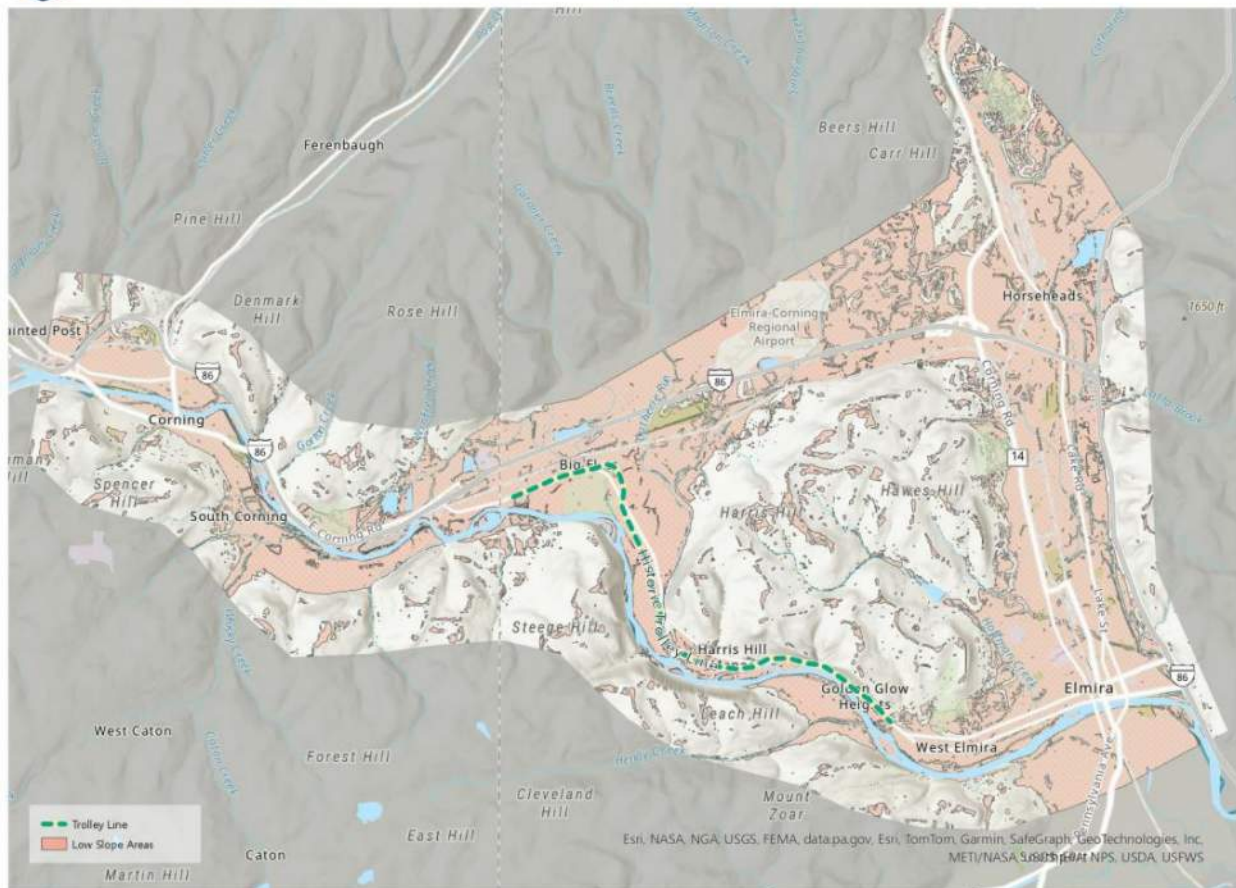


Figure 3: Site Suitability Analysis - Low Slope Areas

3.0 COMMUNITY PROFILE

The project area is located within Chemung County and Steuben County. The service area will benefit the southern finger lakes region and is proposed to provide connectivity with existing multi-use trail networks including, the Painted Post Trail (Erwin, Painted Post, Riverside), Sperr Park Trail (Big Flats), Catharine Valley Trail (Horseheads, Veteran, Millport, Montour Falls), and the Lackawanna Trail (Elmira, Waverly). Regional benefits of the Chemung River Greenway will be realized at the completion of future construction phases and will include greater connection between the two cities, small-scale and entrepreneurial economic development along the route, increased access to outdoor recreation and alternative transportation, overall better quality of life for residents, and enhanced outdoor and recreational assets for the region.

3.1.1 Municipal Jurisdictions

The immediate service area, adjacent to the proposed multi use trail includes municipalities including the Town of Corning, City of Corning, Village of South Corning, Town of Big Flats, Town of Horseheads, Village of Horseheads, Village of Elmira Heights, Town of Elmira, and City of Elmira.

Table 1: Project Area Municipalities

Counties	Cities	Towns	Villages
Chemung County	Elmira	Big Flats Elmira Horseheads	Elmira Heights Horseheads
Steuben County	Corning	Corning	South Corning

3.1.2 Economic and Demographic Characteristics

The two-county immediate service area contains communities that have been identified by the state and federal government as having various burdens, economically. The following summary of regional demographic and economic indicators is provided, maps are included in Appendix C.

Table 2: Project Area Demographic Conditions

Census Tract	Municipality	County	Median Household Income, 2020 ACS 5-Year	Poverty Rate, 2020 ACS 5-Year	Population, 2020 ACS 5-Year	ARC Economic Status, 2023	Federal Opportunity Zone, 2018	HUD Qualified Census Tract, 2022	DEC Potential Environmental Justice Area, 2020	Draft Disadvantaged Community, 2022
36015000100	City of Elmira	Chemung	\$33,592	37.0%	2,644	Distressed		Qualified	PEJA	DAC
36015000200	City of Elmira	Chemung	\$42,883	18.4%	2,488			Qualified	PEJA	
36015000400	City of Elmira	Chemung	\$37,094	27.8%	2,452	Distressed			PEJA	
36015000500	City of Elmira	Chemung	\$54,779	13.9%	2,601					
36015000600	City of Elmira	Chemung	\$33,152	38.1%	3,514	Distressed	Designated	Qualified	PEJA	DAC
36015000700	City of Elmira	Chemung	\$24,531	50.8%	2,175	Distressed	Designated	Qualified	PEJA	DAC
36015000900	City of Elmira	Chemung	\$51,402	11.0%	3,199				PEJA	DAC
36015001000	City of Elmira	Chemung	\$34,559	32.9%	2,897	Distressed	Designated	Qualified	PEJA	
36015001100	City of Elmira	Chemung	\$48,194	10.8%	3,486				PEJA	
36015010301	Town of Big Flats	Chemung	\$79,013	1.7%	4,577					
36015010302	Town of Big Flats	Chemung	\$76,127	5.4%	2,982					
36015010400	Village of Horseheads	Chemung	\$61,886	2.7%	3,541					
36015010500	Village of Horseheads	Chemung	\$43,643	9.5%	2,825				PEJA	DAC
36015010600	Town of Horseheads	Chemung	\$64,444	19.5%	2,976					
36015010701	Town of Horseheads	Chemung	\$94,904	13.0%	3,074				PEJA	
36015010702	Town of Horseheads	Chemung	\$66,177	9.2%	4,189					
36015010800	Town of Horseheads	Chemung	\$45,743	18.1%	3,772				PEJA	DAC
36015010900	Town of Elmira	Chemung	\$76,474	6.3%	4,781					
3601962400	City of Corning	Steuben	\$54,958	15.9%	2,847					
3601962500	City of Corning	Steuben	\$37,273	21.4%	2,284	Distressed		Qualified		
3601962700	City of Corning	Steuben	\$53,477	20.1%	3,216				PEJA	
3601962800	Town of Corning	Steuben	\$71,396	2.9%	3,467					
3601962900	Town of Corning	Steuben	\$95,000	7.3%	2,747					

The Apalachin Regional Commission designates 5 project area census tracts as “distressed” due to them being: 1) within at-risk and transitional counties, 2) have a median family income no greater than 67 percent of the United States average, and 4) a poverty rate of 150 percent of the United States average or greater.

The United States Department of Housing and Urban Development (HUD) has identified 6 project area census tracts as “Qualified Census Tracts,” meaning that 50 percent of households with incomes below 60 percent of the Area Median Gross Income (AMGI) or have a poverty rate of 25 percent or more.

Opportunity Zones were created under the Tax Cuts and Jobs Act of 2017 to identify economically distressed community investments that may be eligible for preferential tax treatment. In 2018, 3 communities in the project area were designated as Federal Opportunity Zones.

3.1.3 Means of Transportation to Work

Transportation in Chemung and Steuben County is dominated by personal vehicles, with over 95% of the working population in the two county area having one of more vehicles available. Within the project area, on average 77.6% of the working population drives alone to work.

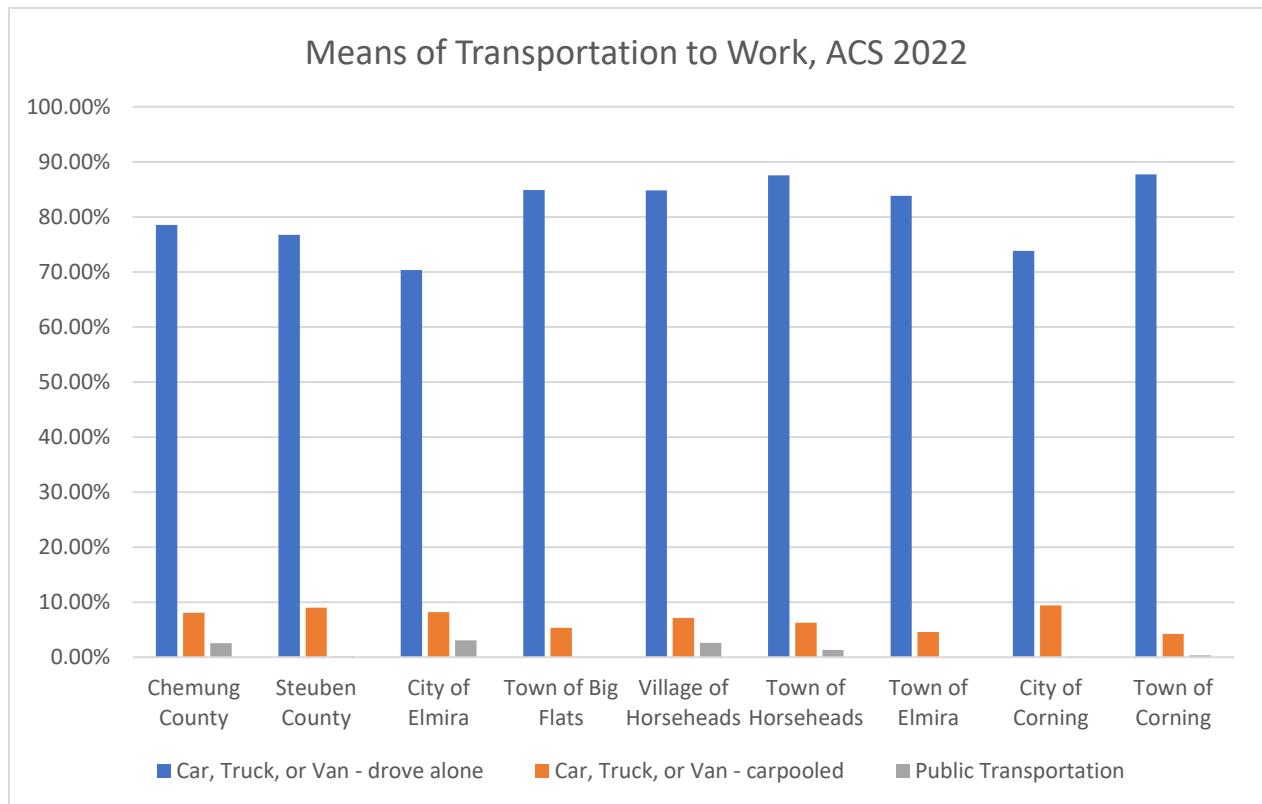


Figure 4: Means of Transportation to Work, 2022 ACS

3.1.4 **Benefits to Community**

Across the nation, communities are investing in multi-use trail infrastructure. The newly completed Empire State Trail demonstrates the growing interest in connecting residents and visitors to the natural, cultural, and historic assets of the state. The Corning to Elmira multi-use trail will link both communities, provide a safe and enjoyable outdoor recreation opportunity, encourage healthy lifestyles, support small scale economic development, and contribute to the development of a local, nonmotorized transportation route which will help to address social equity. Additionally, as we seek to promote our region's quality-of-life for workforce recruitment and retention, the creation of a multi-use trail asset would greatly enhance our community's overall livability. Please refer to Section 6.1 Trail Benefits for more information on how the proposed trail will benefit the community.

3.1.5 **Regional Tourism Characteristics**

This intermunicipal project proposes connections to existing multi-use trails in the study area. Various regional plans have labeled regional trail connections as a priority to encourage tourism. The Southern Tier Regional Economic Development Council 2022 Southern Tier Annual Report established its regional priority to develop tourism business in the Southern Tier. The 2021 New York State Office of Parks, Recreation and Historic Preservation (OPRHP) released the Final Statewide Greenways Plan/Final Generic Environmental Impact Statement (FGEIS). This plan encourages the promotion of greenway trails system as a destination for tourism. The 2015 I-86 Corridor Strategic Plan states that tourism can be supported through the development of a network of regional plans. Local plans in support of trails can be found in Section 4.5.5.

3.1.6 **Environmental Justice Areas**

Environmental Justice is the fair and meaningful treatment of all people, regardless of race, income, national origin or color, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Commissioner Policy 29 provides guidance for incorporating environmental justice into review and identifies potential environmental justice areas. A Potential Environmental Justice Area means a minority or low-income community that may bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

Lands of the project area include DEC defined Potential Environmental Justice Areas. Please refer to Appendix D, Environmental Justice Area Map and Table, created with DEC Info Locator Tool.

3.1.7 **Disadvantaged Communities**

Disadvantaged communities (DACs) are often overlooked in climate policy initiatives and are established to ensure direct benefit from the State's historic transition to cleaner, greener sources of energy, reduced pollution and cleaner air, and economic opportunities. Lands of the project area include Disadvantaged Communities. Please refer to Appendix D, Disadvantaged Communities Map and Table, created with DEC Info Locator Tool.

3.1.8 Legislative Districts

The project is located within the following legislative districts:

Table 3: Project Area Legislative Districts

Chemung County		
District	District Number	Candidate
Congressional	23	Nick Langworthy
NYS Senate	58	Thomas O'Mara
NYS Assembly	124	Christopher Friend
Steuben County		
Congressional	23	Nick Langworthy
NYS Senate	58	Thomas O'Mara
NYS Assembly	132	Philip A. Palmesano

3.2 EXISTING CONDITIONS

3.2.1 History of the Region

The Chemung River is a major tributary of the Susquehanna River which supplies the Chesapeake Bay, the nation's largest estuary. The Chemung River is approximately 46 miles long, flows generally east-southeast from the confluence of the Tioga River and Cohocton River near Painted Post to Waverly where it joins the Susquehanna. The Chemung River Valley's dominant population centers are the City of Corning and the City of Elmira. The Chemung Greenbelt project within the area is a noted priority project in the New York State Open Space Plan with the objective of conserving riverfront land and critical habitats. The area around Big Flats has been the subject of conservation efforts to collectively protect lands and shoreline hosting threatened and protected plant and animal species.

3.2.2 Existing Trails and Recreational Resources

Existing trails and parks within the project boundary are owned and operated by state organizations, municipalities, non-profit organizations, and private entities. These amenities are made up of public and neighborhood parks, as well as multiuse trails that are spread throughout their respective counties and zoning districts.

There are various municipal recreation facilities that are located within the project study boundary. These trails and greenspaces are in the Town of Big Flats, Town of Horseheads, Town of Elmira, City of Elmira, and the City of Corning. These facilities exist within various zoning districts, including Residential, Conservation, Town Center, Commercial, Industrial, Rural, and Lakes, Ponds, Streams. Refer below for a comprehensive list of municipal recreation facilities and corresponding municipal zoning classifications.

Table 4: Recreational Resources in Project Area

Recreational Resource Name	County	Municipality	Zoning District(s)
Lackawanna Rail Trail	Chemung	City of Elmira	Light Industrial Gateway Commercial Multi-Family General Commercial 1-2 Family
Canfield Park Walking Trail	Steuben	City of Corning	Residential Transition
Big Flats Rail Trail (Sperr Park Rail Trail)	Chemung	Town of Big Flats	Business Neighborhood Non-Retail Lakes, Ponds, Streams Town Center Rural District
Catharine Valley Trail	Chemung	Town of Horseheads	Low Density Residential Agriculture
Twain Trail (Tanglewood)	Chemung	Town of Elmira	Agricultural Residential
Denison Park	Steuben	City of Corning	Public Conservation
Hillvue Park	Steuben	City of Corning	Public Conservation
Houghton Park	Steuben	City of Corning	Residential 1
McKinney Park	Steuben	City of Corning	Public Conservation
Stewart Park	Steuben	City of Corning	Public Conservation
William Street Park	Steuben	City of Corning	Public Conservation
Canfield Park	Steuben	City of Corning	Residential Transition
William Street Park	Steuben	City of Corning	Public Conservation
Grove Park	Chemung	City of Elmira	Conservation
Eldridge Park	Chemung	City of Elmira	Conservation
Blandford Park	Chemung	City of Elmira	Conservation
Wisner Park	Chemung	City of Elmira	Conservation
Sperr Memorial Park	Chemung	Town of Big Flats	Business Neighborhood Non-Retail Lakes, Ponds, Streams Town Center Rural District
Barnes Hill Park	Chemung	Town of Big Flats	Residential 1
Henry Minnier Park	Chemung	Town of Big Flats	Conservation
Maple Shade Park	Chemung	Town of Big Flats	Rural District
Golden Glow Park	Chemung	Town of Big Flats	Residential 2
Steege Hill Nature Preserve	Steuben	Town of Corning	Residential Rural Conservation
Pirozzolo Park	Chemung	Town of Elmira	AA Residential (moderate) AAA Residential (low)
Oakridge Park	Chemung	Village of Elmira Heights	Business District
Elba Village Park	Chemung	Village of Elmira Heights	Medium Density Residential
Holding Point Recreation Complex	Chemung	Village of Horseheads	Industrial
Mill Street Park	Chemung	Village of Horseheads	Neighborhood Residential
Sullivan Park (Thorne Street Park)	Chemung	Village of Horseheads	Two Family Residential
Linear Park	Chemung	Village of Horseheads	One Family Residential

3.2.3 Linear Trails in Project Area

There are four existing linear trails within the project area, the Catharine Valley Trail, Lackawanna Trail, Big Flats Trail, and the Painted Post Trail. Chemung County is currently exploring opportunities for a north/south multiuse trail to connect the Lackawanna Rail Trail and the Catharine Valley Trail. This proposed multiuse trail is referenced in the Chemung Canal Connector Trail Feasibility Study prepared by Fagan Egnieers and published December 2023. The proposed trail would provide amenities such as parking areas, restroom facilities, bike racks, information kiosks, fix-it stations, trash/recycling receptacles, water fill stations, benches, and picnic tables. The Chemung River Greenway is proposed to follow the Chemung River in a west/east direction, connecting the Painted Post Trail to the Lackawanna Trail.



Figure 5: Project Area Linear Trails

3.2.3.1 Catharine Valley Trail

The Catharine Valley Trail is a 13-mile asphalt and crushed stone trail that runs through Chemung and Schuyler counties. The trail is ideal for cycling, hiking, snowshoeing, and cross-country skiing. This trail ranges from downtown Watkins Glen to the hamlet of Pine Valley, connecting the communities of Watkins Glen, Montour Falls, Pine Valley, and Horseheads. The trail is equipped with mile markers, several benches, picnic tables, and

grills. The entire trail is ADA compliant. There are nearby attractions that are accessible from the trail, including the Watkins Glen State Park and the Queen Catharine Marsh. There are two restrooms located on the trail. Parking is available at the northern end waterfront and the southern end at Mark Twain State Park. The trail is maintained and operated by NYS Office of Parks, Recreation and Historic Preservation (OPRHP), The Friends of the Catharine Valley Trail are a volunteer group that supports the trail with planned events, clean ups, and trail maintenance as well.



Photograph 1: Catharine Valley Trail, Watkins Glen

3.2.3.2 Lackawanna Trail



Photograph 2: Lackawanna Trail, Elmira

The Lackawanna Trail is an 8.5-mile asphalt trail that runs from Eldridge Park in the City of Elmira to the Lowman Crossover in the Town of Ashland. The trail is ideal for cycling, walking, jogging, and cross-country skiing, and snowshoeing. This trail passes through residential, industrial, and business-zoned districts in the City of Elmira. The trail has been extended from Eldridge Park to Lake Street in the City of Elmira, with a proposed extension north toward McCanns Boulevard. The trail is owned by the New York State Department of Transportation (NYSDOT). The City of Elmira maintains the western portion of the trail, while Chemung County is responsible for maintaining the eastern portion. There are currently no restroom facilities along the trail. Parking and trail access is located at Eldridge Park and the City of Elmira-owned lot located on East Water Street. There is a smaller parking lot located at the western end of the trail.

3.2.3.3 Big Flats Trail - Sperr Memorial Park

The Big Flats Trail is a 3.5-mile linear asphalt and crushed gravel trail that begins in Sperr Memorial Park in the Town of Big Flats. The trail is ideal for cycling, walking, and running. There are two parking areas located on the west off of South Hibbard Road and the east off of Kahler Road for the trail. The parking area at Kahler Road entrance is ADA accessible. The trail includes benches, garbage collection bins, dog walking amenities, and some exercise stations. The adjacent Sperr Memorial Park includes playground, pavilion, viewing platform, information kiosks, grill, benches, and a memorial to Trooper Andrew Sperr.



Photograph 3: Big Flats Trail, Town of Big Flats

3.2.3.4 Painted Post Trail

The Painted Post Trail is a 1.1-mile asphalt trail that runs from Craig Park in Painted Post to the intersection of Western Lane and Cutler Avenue in the City of Corning. Painted Post Trail connects schools, playgrounds, other trails and residential neighborhoods west of Corning. Parking for the trail can be found at the trailhead in Craig Park. The park is utilized for various community events, most notably the Wine Glass Marathon, which takes place annually.



Figure 6: Wineglass Marathon Route along Painted Post Trail

3.2.4 Public Land Holdings

3.2.4.1 *The Nature Conservancy*

The Nature Conservancy is a global nonprofit organization founded in 1951. Their mission is to protect land, water, and ecosystems through policy development, research, outreach, and habitat conservation and rehabilitation projects. In the project area, The Nature Conservancy owns the Frenchman's Bluff Preserve which is approximately 278 acres of land spanning five adjacent parcels in the Town of Big Flats. The preserve contains approximately 9 miles of trails and connects to the Tanglewood Nature Center property and trail system to the north. The Nature Conservancy properties are bordered by the Chemung River to the south. Frenchman's Bluff Preserve is open to the public all year for outdoor activities such as birdwatching, hiking, snowshoeing, and cross-country skiing. Hunting is allowed with written permission. Please refer to Appendix D, Frenchman's Bluff Preserve Map for mapped GIS data of The Nature Conservancy lands in the project area.



Photograph 4: Tanglewood Nature Center - Frenchman's Bluff

3.2.4.2 Finger Lakes Land Trust

The Finger Lakes Land Trust is a nonprofit organization founded in 1989. Their mission is to protect forests, farmlands, gorges, and shorelines in the Finger Lakes Region of New York. The Finger Lakes Land Trust has created public nature preserves and aided landowners in conservation easement transactions to save over 30,000 acres in the Finger Lakes Region. Public nature preserves are free and open to the public for recreational activities such as hiking, cross-country skiing, paddling, and bird watching. In the project area, there are approximately 1,075 acres of land and 10.5 miles of trails across three preserves owned by the Finger Lakes Land Trust. The Houghton Land Preserve is in Steuben County approximately 1.5 miles south of Corning and contains 194 acres and 1.9 miles of trails. The Steege Hill Nature Preserve is in Chemung County approximately 2.5 miles south of Big Flats and contains 793 acres and 7 miles of trails. The Plymouth Woods Nature Preserve is in Chemung County approximately 5.5 miles west of Elmira and 0.7 miles south of the Chemung River. The Plymouth Woods Nature Preserve contains 88 acres and 1.6 miles of trails. Please refer to Appendix D, Finger Lakes Land Trust Maps obtained from the Finger Lakes Land Trust website.



Photograph 5: Steege Hill Nature Preserve

3.2.4.3 NYS DEC Wildlife Management Areas

The project area includes two parcels owned by Big Flats Wildlife Management Area. The main purposes of these areas are for outdoor recreation dependent on wildlife, wildlife management, and habitat management. One of the parcels is split by State Route 352 and is bordered by the Chemung River to the west. It is approximately 136 acres. The second parcel is accessible by Far Rockway Road and is bordered by the Chemung River to the north. It is approximately 104 acres and contains a notably steep slope towards the river. These areas are open year-round for hunting, fishing, trapping, and wildlife observation activities and do not contain any designated trails. Please refer to Appendix D, NY DEC Wildlife Management Areas Map obtained from the NYS DEC website.

3.2.5 Chemung River and Tributaries

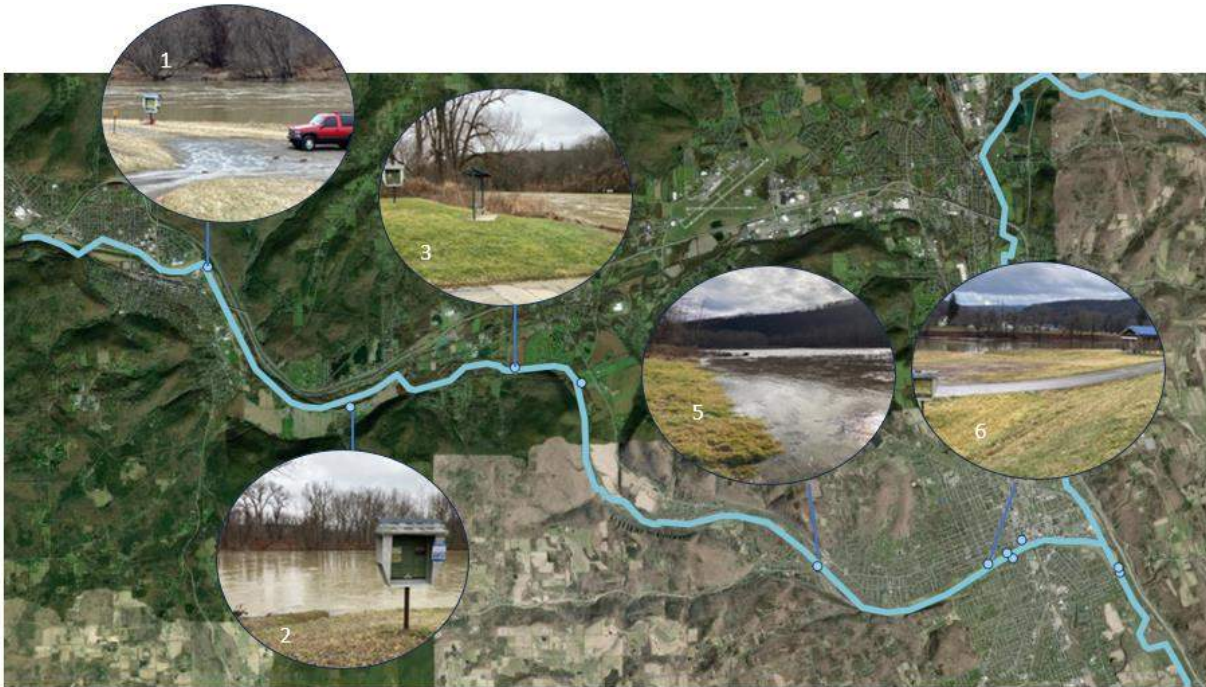
3.2.5.1 Waterways

The Chemung River begins at the western most portion of the project area where the Tioga River and Cohocton River terminate. The Chemung River generally flows west to east and is a tributary of the Susquehanna River. Flowing through Steuben and Chemung counties, the Chemung River is a Class C River/Stream and terminates at the Susquehanna River in Athens, PA. A search of the DEC Info Locator and the EPA WATERS GeoViewer 2.0 indicated several

named and unnamed Class C tributaries to the Chemung River in the project area. Please refer to Appendix D, Table 3.2.6.1 Chemung River Tributaries, for a list of tributaries in the project area.

The Chemung River is a gateway to the Chesapeake Bay. The blueway trail includes public access points within the project area along the Chemung River at the following sites from west to east:

1. Conhocton Street, City of Corning
2. River Road, Town of Corning
3. Botcher's Landing, Town of Big Flats
4. Minier's Field, Town of Big Flats
5. Fitches Bridge, Town of Big Flats
6. Grove Street, City of Elmira
7. Dunn Field, City of Elmira



3.2.5.2 Floodways

The FEMA mapped floodway associated with the Chemung River changes in width throughout the project area as the river experiences varied terrain and flood control structures. Through the City of Corning, the floodway is fairly uniform and ranges from approximately 500 to 800ft wide. South of the City of Corning Sewage Treatment Plant and as the river passes South Corning, the floodway widens to approximately 0.2 to 0.3 miles. In the project area, the floodway reaches its widest point as it passes through the Town of Big Flats. At the widest point, the approximate 1.2-mile-wide floodway encompasses mostly farmland and the Willow Creek Golf Club. The floodway narrows downstream as the riverbanks steepen. As the river approaches West Elmira and through the City of Elmira, the

floodway maintains a more uniform width ranging from 500ft to 800ft. Several tributaries to the Chemung River in the project area have a mapped FEMA floodway. These tributaries include Cutler Creek, Post Creek, Whisky Creek, Winfield Creek, Sing Sing Creek, and Newtown Creek. Please refer to Appendix D, Chemung River FEMA Floodway Map, for mapped GIS floodway data in the project area.

3.2.5.3 Levees and Flood Control Structures

As the Chemung River passes through the City of Corning, it is contained on both sides by levees. The river continues southeast and is contained by a levee on the west side and I-86 on the east side. The river is free of flood control structures between the western boundary of South Corning and the eastern boundary of West Elmira. The river is controlled by levees on both sides as it passes through the City of Elmira. The Chemung River exits the project area east of Elmira and is bordered by a levee to the west and Interstate 86 (I86) to the east. The levee system contains floodwalls in Corning and Elmira. In Corning, floodwalls are located along I86 directly downstream from where the Cohocton River, Tioga River, and Chemung River merge. Cutler Creek contains floodwalls on both sides of the stream where it flows parallel to I86. Floodwalls are located at Bridge Street and NY-414 river crossings and adjacent to the Corning Inc. World Headquarters property. The floodwalls in Elmira are located on both sides of the river approximately between Walnut Street and East Water Street Park. Other infrastructure for the leveed systems includes boreholes, pump stations, relief wells, gravity drains, and toe drains. Please refer to Appendix D, Chemung River Leveed Area Map, for leveed areas defined in the National Levee Database for the project area.

Informal levee top foot paths are commonly utilized by pedestrians in the City of Corning and City of Elmira. A small section of paved levee top trail is located on the north side of the Chemung at Hillvue Park.



Photograph 6: South Shore Chemung River, Conhocton Street, City of Corning



Photograph 7: North Shore Chemung River, Grove Street, City of Elmira

3.2.6 Steep Slopes and Valleys

The major valley and the focal point of the project area is the Chemung River Valley. Minor valleys include those surrounding Post Creek in Corning and the Sing Sing Creek watershed in Big Flats. Some of the steepest terrain in the project area includes Denmark Hill, Steege Hill, Harris Hill, Leach Hill, and Hawley Hill. The Chemung River experiences steep riverbanks as it passes through the Town of Big Flats. The DEC Wildlife Management Areas and The Nature Conservancy properties along the Chemung River are among the areas of notably steep terrain. Please refer to Appendix D, Topographic Map, for a topographic map of the project area obtained from the DEC Info Locator tool.

3.2.7 Roadways

Road and bridge construction and maintenance is divided between several agencies and municipal levels in New York State depending on the road or bridge's jurisdiction as well as any agreements in place between the jurisdiction with authority of the road and a partner – typically the local municipality. Understanding the jurisdictional authority for each road is necessary for maintenance requests and partnerships for road construction projects.

- New York State: New York State maintains jurisdictional authority over several roads throughout the project boundary including:
 - NY State Route I-86 throughout Steuben and Chemung Counties;
 - State Route 352 throughout Steuben and Chemung Counties;
 - State Route 414, Pulteney Street, Denison Parkway, and Center Way in the Town of Corning;
 - State Route 14 throughout the Town / Village of Horseheads and Town / Village of Elmira;
 - Lake Street, Maple Avenue, North Main Street, Park Place, and Pennsylvania Avenue in the Town / Village of Elmira; and
 - Main Street in the Town / Village of Horseheads.
- Steuben County: Steuben County maintains jurisdictional authority over several roads throughout the project boundary including College Avenue, Corning Hornby Road, Dyke Road, Hamilton Road, River Road, Spencer Hill Road, and Whiskey Creek Road in the City / Town of Corning.
- Chemung County: Chemung County maintains jurisdictional authority over several roads throughout the project boundary including:
 - Breesport North Chemung Road in the City / Town / Village of Elmira and the Town / Village of Horseheads;
 - Coleman Avenue in the Town of Big Flats and the City / Town / Village of Elmira;
 - Colonial Drive in the Town of Big Flats and the Town / Village of Horseheads;
 - County Road 64 in the Town of Big Flats and the Town / Village of Horseheads;

- Fisherville Road in the Town of Big Flats and the Town / Village of Horseheads;
- Grand Central Avenue in the City / Town / Village of Elmira and the Town / Village of Horseheads;
- Hickory Grove Road in the Town of Big Flats and the Town / Village of Horseheads;
- Hillcrest Road in the Town of Big Flats and the City / Town / Village of Elmira;
- Lake Road in the City / Town / Village of Elmira and the Town / Village of Horseheads;
- Sears Road in the Town of Big Flats and the Town / Village of Horseheads;
- Sing Sing Road in the Town of Big Flats and the Town / Village of Horseheads;
- Watercure Hill in the City / Town / Village of Elmira and the Town / Village of Horseheads;
- Airport Road, Arnot Road, Chambers Road, Daniel Zenker Drive, Harris Hill Road, Hibbard Road, Kahler Road, Main Street, Maple Street, Reinbold Road, South Corning Road, Schweizer Road, Soaring Hill Drive and West Hill Road in the Town of Big Flats;
- Bancroft Road, Brant Road, Jerusalem Hill Road, Lake Street, Lowman Road, Mount Zoar Street, Oneida Road, West Hill Street and West Hill Road in the City / Town / Village of Elmira; and
- Church Street, East 14th Street, East Franklin Street, Fairview Road, Industrial Park Road, Ithaca Street, Jackson Creek Road, Lattabrook Road, Lenox Avenue, Middle Road, North Chemung Road, Oakwood Avenue, Old Sullivan Road, Philo Road, Ridge Road, Oakwood Avenue, Veteran Hill Road, Watkins Road, and Wygant Road in the Town / Village of Horseheads.
- Local Roads: All roads within the project boundary that are not under the jurisdiction of New York State or Chemung / Steuben Counties fall under the jurisdiction of the City, Town, or Village.

3.2.8 Traffic and Safety

Based on data provided by the NYS Department of Transportation, there were 11,176 reported motor vehicle crashes that occurred in the project boundary between 2018 and 2022. Locations for where the highest number of these crashes occurred include:

- Denison Parkway West at South Bridge Street in the City / Town of Corning;
- Denison Parkway East at Cedar Street in the City / Town of Corning;
- West Water Street at Walnut Street in the City / Town / Village of Elmira;
- Main Street at Water Street in the City / Town / Village of Elmira;
- Clemens Center Parkway at Water Street in the City / Town / Village of Elmira;
- Clemens Center Parkway at Hudson Street in the City / Town / Village of Elmira; and
- Lake Street at Church Street in the City / Town / Village of Elmira.

Among the 11,176 motor vehicle crashes reported within the project boundary, 160 crashes involved a bicyclist with two crashes resulting in a fatality; 212 crashes involved a pedestrian

with nine crashes resulting in a fatality. There is a high density overlap with overall crashes and crashes involving bicyclists and pedestrians on Denison Parkway, Walnut Street, Clemens Center Parkway, Lake Street, and Maple Avenue.

3.2.9 Rail Infrastructure

3.2.9.1 Current Rail

The Conrail Railroad is the primary railroad that travels through the project area. The railroad follows SR 414 into Corning, continues along I-86 and the Chemung River towards Big Flats. In Big Flats, the railroad travels parallel to I-86 and is located between I-86 and County Road 64. The railroad changes to Norfolk & Southern after it crosses County Road 64 near Chambers Road. The Norfolk & Southern line crosses SR 14, then turns to follow SR 14 south to Elmira. The Penn Central Railroad merges with the railroad east of the SR 14 intersection with the Norfolk & Southern Railroad, and extends north to the HOST Southern Tier Logistics facility in Horseheads. The Norfolk & Southern track changes to the Erie Lackawanna Railroad at the rail yard located between Magee Street and Clemens Central Parkway in Elmira. Conrail Railroad also has a segment of railroad that starts near Fallbrook Park in Corning and travels east to west, parallel to the Chemung River through the City of Corning. This segment is located on the south side of the river and continues along the Tioga River and out of the project area. The operational statuses of the routes in the project area are unknown. Please refer to Appendix D, Existing Rail Infrastructure Map, for mapped NGDA railroad data from the U.S. Census Bureau in the project area.

3.2.9.2 Historic Rail (Trolley)

The Elmira, Corning, & Waverly R.R. (E.C. & W. Ry.) operated a high-speed electric railway that serviced commuters between Corning and Waverly. The rail segment between Waverly and Elmira was constructed by E.C. & W. Traction Co. and began carrying passengers on October 8, 1909. On June 17, 1911 the rail segment from Elmira to Corning was open to commuters. During the early days of its operation, the cars carried approximately 3,000 to 5,000 passengers per day. 1930, approximately 900 passengers were riding daily. The line ran its last cars on March 31, 1930. The line was 18 miles long between Corning and Elmira and had 26 stops along its route. The trolley was planned to run parallel to the main line of the Erie R.R. but right-of-ways were also purchased. The book "Elmira and Chemung Valley Trolleys in the Southern Tier" by William R. Gordon describes the route between Elmira and Corning as follows "From Elmira the route led west on Water Street over private right-of-way to Big Flats, keeping near the base of Harris Hill, then through the streets in Big Flats and again on private right-of-way, and along, the Erie, and again crossed the Chemung River on another bridge. Continuing alongside the Erie to the South Corning car barn where there was a track connection between the car barns and the Erie Railroad." Please refer to Appendix D, E.C. & W. Ry. Historic Trolley Map, for a map from "Elmira and Chemung Valley Trolleys in the Southern Tier" by William R. Gordon showing the trolley route in Chemung County.

3.2.10 Environmental Conditions

At the State level, the NYS Department of Conservation regulates natural resources in the project area, identified proposed projects will require detailed review of the site in accordance with state and federal regulations. Proposed projects will require review by the Regional DEC Permit Administrator to identify necessary permits and/or mitigation efforts.

From a broad perspective, the project area includes waterways, wetlands, agricultural lands, forests, and developed centers. The project overlies principal and primary aquifers.

The project area is in the vicinity of natural communities including Cliff Community, Shale Talus Slope Woodland, Appalachian Oak-Hickory Forest, Appalachian Oak-Pine Forest, Hemlock-Northern Hardwood Forest. Endangered or threatened species include Wild Hydrangea, Green Floater, Nodding Onion, Purple Wild Bergamot, Timber Rattlesnake, and Bald Eagle.

The area includes municipal and private SPDES permits associated with permitted wastewater discharges, regulated by the NYSDEC. The project area includes State and Federal Environmental Remediation Parcels related to historic manufacturing, disposal of waste materials, and remediation activities.

Reclaimed and permitted active mines are within the project area, generally following the Chemung River. The active mines include sand and gravel, reclaimed mines include glacial till, topsoil, and sand and gravel mines.

4.0 POLICY AND ZONING ANALYSIS

4.1 RELATIONSHIP TO EXISTING REGIONAL PLANS

The following plans were evaluated to identify support or barriers to trail development in the project area, each plan provides goals, objectives, and recommendations:

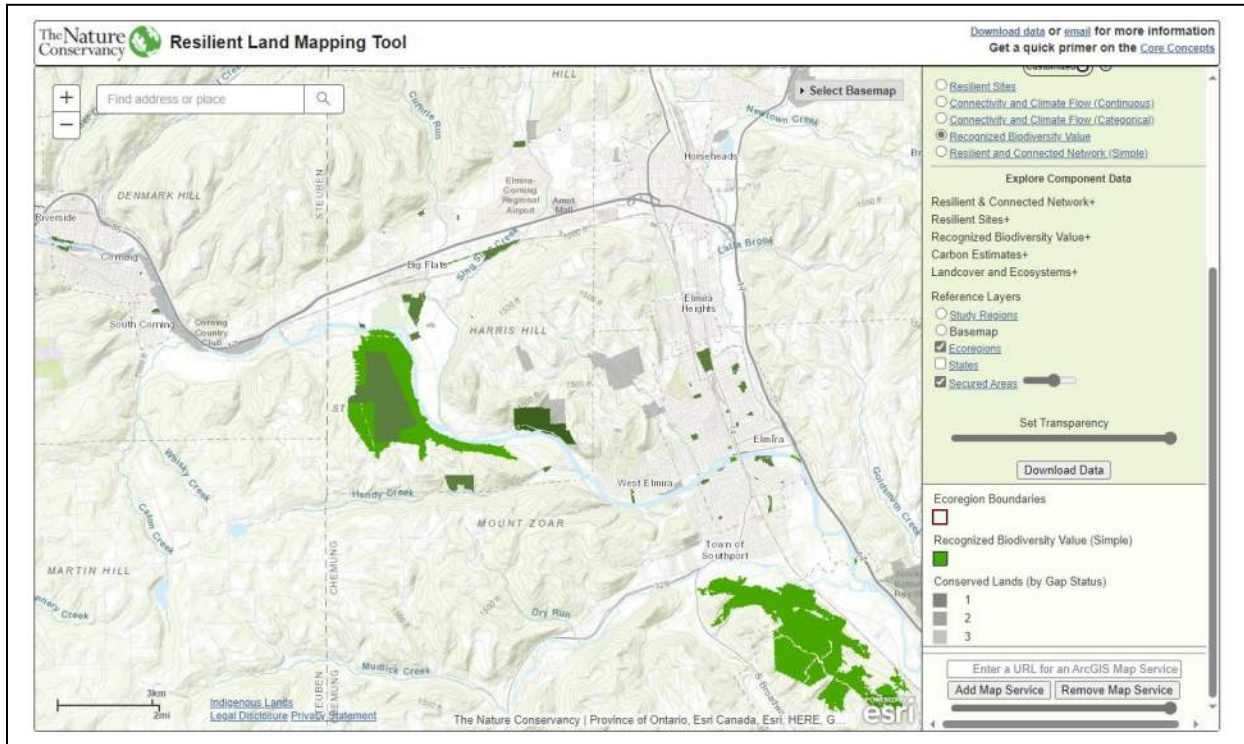
- The Nature Conservancy Annual Report, 2023
- New York State Open Space Conservation Plan, 2016
- Conservation Focus Areas of the Upper Susquehanna Watershed within the Finger Lakes Land Trust's Service Area, 2012
- Southern Tier Regional Economic Development Council Southern Tier Annual Report, 2022
- Southern Tier Central Comprehensive Economic Development Strategy, 2021
- Southern Tier Central Susquehanna-Chemung Action Plan, 2012
- Economic Impact of Visitors in New York Finger Lakes Focus 2022, September 2023
- Chemung River Trail Assessment and Comprehensive Master Plan, February 2008
- Friends of the Chemung River Watershed Strategic Plan, 2022-2026
- Susquehanna Chemung Action Plan, February 2012
- Southern Finger Lakes Quality of Life Messaging Report, May 2021
- I86 Innovation Corridor Strategic Action Plan, July 2015

Each plan is summarized and language that is aligned with the Chemung River Greenway is identified in green boxes, concepts that provide barriers to development are identified in red boxes.

4.1.1 The Nature Conservancy Annual Report

The Nature Conservancy Annual Report identifies the 30 x 30 Initiative to support the nations' conservation commitments with scientific and technical resources, including the

TNC's Our Resilient Lands Mapping Tool, which identifies a network of connected lands across the United States with unique topographies, geologies and other characteristics that make them resilient to climate change and priorities for conservation. The Chemung River Greenway project area includes several areas with recognized biodiversity values.



"The Nature Conservancy has a strong legacy of 'best-in-class' conservation work...set the 2030 goals of protecting a significant proportion of the world's land, fresh water and oceans by the end of the decade" pg. 12

*2030 Strategic Goals, Our Goals for 2030 | Climate Change & Biodiversity Loss Solutions (nature.org)
"Conserve more than 620,000 miles of rivers. We will conserve 1 million kilometers (621,000 miles) of river systems and 30 million hectares (74 million acres) of lakes and wetlands by engaging in collaborative partnerships, promoting innovative solutions, and supporting policies that improve the quality and amount of water available in freshwater ecosystems and to communities."*

4.1.2 New York State Open Space Conservation Plan

The Open Space Conservation Plan serves as the blueprint for the State's land conservation efforts, the plan is under revision in 2023, the 2016 plan is the most recent adopted plan. The Plan's four overarching objectives, utilized to direct State priorities, policies, and actions include:

- Promote outdoor recreation
- Address climate change
- Ensure clean water, air and land for a healthy public and vibrant economy
- Protect, use and conserve our natural resources and cultural heritage

The Chemung River Greenbelt is identified in the 2016 Plan as a Regional Priority Conservation Project.

"CHEMUNG RIVER GREENBELT [107.] ♦ - Located in Chemung and Steuben counties, this project expands and enhances significant recreational resources in a unique, scenic landscape while protecting important wildlife habitat. A Chemung River watershed greenway was first proposed in the Southern Tier Central Regional Planning Board's 1976 Open Space Plan and was further studied in the 2005 Chemung River Comprehensive Master Plan, which covered the Chemung County portion of the watershed. The project would include the Chemung Basin River Trail, a water trail consisting of a series of boat launches in the Chemung River Watershed that connects to the Susquehanna River and eventually to the Chesapeake Bay.

The Chemung Basin River Trail and related river shore trails are supported by the Friends Chemung Basin River Trail of the Chemung River Watershed, as well as the involved communities. In addition to recreational resources provided by both the river corridors and land-based trails, preservation of open space in the area would link valuable wildlife habitats for timber rattlesnakes, black bear, and bald eagles. Several areas of state land would also be linked, including the Cameron State Forest, the Cameron Mills State Forest, Tracy Creek State Forest, Pinnacle State Park and Erwin Hollow State Forest. Additional protected lands include 1,200 acres held by the Finger Lakes Land Trust, the Nature Conservancy, and Tanglewood Nature Center.

DEC owns and has permanent easements along the Chemung River for flood control purposes. Increased suburban sprawl in the Elmira-Corning area and scattered residential development on the more rural areas threaten the project area. Specific projects would include but not be limited to: 1. Open space protection of undeveloped floodplain with a focus on high-quality wildlife habitat; 2. Boat launches and fishing access points along the Canisteo and Cohocton as additions to the Chemung Basin River Trail; 3. Protection of the Chemung Palisades, a scenic and wildlife habitat resource, and blocks of contiguous forest on both sides of the river in the Town of Big Flats; 4. Additional hiking and biking trails and camping facilities, connecting existing public facilities, including the Lackawanna Trail in Chemung County; and 5. Protection of wetlands in the Cohocton River watershed, especially the upper portions of the Cohocton River and its tributaries.

Detailed conservation planning that builds upon existing planning and resource management efforts is needed to prioritize specific projects. This nomination capitalizes on the interest and progress to date of multiple organization and governmental entities in protecting this unique and diverse landscape, with an emphasis on protection of important wildlife habitat, recreational access and scenic vista preservation. Acquisitions have the potential to connect, extend and/or add value to 2002 Open Space projects, such as Steege Hill/Chemung Palisades, Mossy Bank, Valley Rim Trail, West Hill Lands (considered threatened under the NYS Natural Heritage Program) and the Town of Erwin's Green Infrastructure Plan." pg. 144

4.1.3 **Conservation Focus Areas of the Upper Susquehanna Watershed within the Finger Lakes Land Trust's Service Area**

The Finger Lakes Land Trust, in partnership with conservation professionals, developed a list of conservation focus areas which support the region's best remaining natural resources. The Chemung River was identified in the ecoregional planning process as an important

connection on the landscape. The Chemung River Valley in the Town of Big Flats is a focus area in the report, as for "more than 20 years, The Nature Conservancy, Tanglewood Nature Center, Finger Lakes Land Trust, and the Town of Big Flats have worked to conserve the steep forested slopes and rare wildlife resources in this area. Collectively, these groups have protected nearly 1,500 acres."

"Steep cliffs, known locally as The Palisades, are noted as a priority within the Chemung Greenbelt project of the New York State Open Space Plan. The river corridor supports high quality examples of flood plain forest and at least one mussel bed. Chemung County, the Town of Big Flats, and the United States Department of Agriculture collectively own more than 500 acres in this project area, most of which serve the public as parks and recreational areas." pg. 25

4.1.4 **Southern Tier Regional Economic Development Council Southern Tier Annual Report**

The Southern Tier Regional Economic Development Council (STREDC) annual report is a collaborative effort that includes a re-evaluation of investment strategies, priorities, and goals. The Regional report identifies the vision and the regional priority to Develop Tourism Business in the Southern Tier.

"The focus of the 2022 Strategic Plan...is the development and implementation of a comprehensive business development and expansion plan anchored by a targeted workforce recruitment and retention plan." pg. 6

"In addition to being a desirable place to live and work, the ST has many natural and cultural amenities to attract visitors. To maximize their attractiveness, the amenities need to be enhanced by a more robust regional promotional campaign, better wayfinding signage, and a well-trained tourism and hospitality workforce that delivers an unforgettable travel experience." pg. 8

4.1.5 **Southern Tier Central Comprehensive Economic Development Strategy**

The 2021 Southern Tier Central Comprehensive Economic Development Strategy states that restaurants, tourist-focused businesses, and recreational activities were the hardest hit by the lockdowns. CEDS further elucidates the workforce participation, retention, and recruitment challenges in the area, as employers have faced several years of difficulty in hiring. Recognizing that recreation contributes significantly to quality of life.

*"In the years before COVID, local employment in these sectors was below the national average; now local employment in these sectors is 13% the national average...**Recreation**, accommodation, and food service businesses contribute significantly to the quality of life and sense of place in a community. Changes to these businesses make an impact on the 'feel' of a Main Street area." pg. 3*

4.1.6 Southern Tier Central Susquehanna-Chemung Action Plan

The Susquehanna-Chemung Action Plan is a watershed management plan that lays the foundation for coordinated efforts to promote sustainable water stewardship throughout the watershed. Water Resource Goals were identified and include Outdoor Recreation: Connect people to nature.

"Enhance opportunities for watershed residents, children, and tourists to enjoy the region's rivers, lakes, and wetlands by protecting scenic vistas, revitalizing waterfronts, promoting outdoor recreation, and providing additional opportunities for water-based recreation." pg. iii

4.1.7 Economic Impact of Visitors in New York Finger Lakes Focus 2022

The Tourism Economics organization developed a comprehensive model detailing the far-reaching impacts arising from visitor spending in the Finger Lakes of New York. The results of this study show the visitor economy in terms of direct visitor spending, economic impacts, jobs, and fiscal impacts in the broader economy. Of the total \$79 billion spent by visitors to New York, recreation spending registered 10% of each visitor's budget, \$7.52 million in 2022.

"Visitor spending grew markedly in each region as travel confidence rebounded. New York City was the largest tourism region in 2022 (60% of state-wide spending) and saw the largest increase in visitor spending as travelers returned to cities." pg. 12

4.1.8 Chemung River Trail Assessment and Comprehensive Master Plan

The Chemung River Trail Assessment and Comprehensive Master Plan was prepared for the City of Elmira and the Chemung County Waterfront Advisory Committee in February of 2008. This document serves as a feasibility manual for Chemung County municipalities as they develop plans to support trails. The document summarizes the county's existing conditions, and environmental/cultural assessments, while also offering trail implementation strategies, policy review, and design requirements.

"Coordination with adjacent counties and municipalities should be undertaken to ensure that river trail development extends beyond the Chemung County line and links to existing and proposed trails in both Steuben and Tioga Counties in New York State, and Northern Bradford County in Pennsylvania." pg. 1
"It is critical to strengthen linkages to Chemung and Steuben both for boaters and land-side users" pg. 3

4.1.9 Friends of the Chemung River Watershed Strategic Plan

The Friends of the Chemung River Watershed Strategic Plan 2022-2026 was developed to support the following values of the organization: Community and Quality of Life, Conservation, Eco-Tourism, Environmental Advocacy, Environmental Education, Outdoor Recreation, and River Safety.

This document implements existing and future trail development in their Strategic Framework, establishing the following relevant goal and tactics for implementation:

Goal #2: *Improve the ease of water access to the river and riverbank trails and continue to support watershed recreational safety.*

Tactic 1: Support the development of the NY Southern Tier Water Trail with the help of regional tourism promotion agencies.

Tactic 2: Identify key locations and execute water access site upgrades, trail improvements, and other physical improvements.

4.1.10 **Susquehanna Chemung Action Plan**

The Susquehanna Chemung Action Plan was developed in February of 2012 by Southern Tier Central Regional Planning and Development Board, in conjunction with Southern Tier East Planning Development Board. Focusing on the Susquehanna and Chemung Watersheds, this watershed management plan calls for resources to maintain trail systems. The following recommendation was made to support existing documents and organizations that prioritize planning and programming for multimodal trails, specifically along waterways:

"Trails and other recreational facilities are thus an important element of a sustainable local economy." pg. 67

"Near the Water: Provide an interconnected system of marked, maintained, and accessible trails that enable walking, biking, and cross-country skiing along and between the region's waterways.

10.c Implement existing plans for riverside trail systems and amenities, including the Southeast Steuben River Vision, Chemung County River Trail Master Plan, Local Water Revitalization Plans, Susquehanna Greenway Plan, trail components of transportation plans, and the NYS Bicycle and Pedestrian Plan." pg. 68

4.1.11 **Southern Finger Lakes Quality of Life Messaging**

The Southern Finger Lakes Quality of Life Messaging report provides data that pertains to the importance of outdoor recreation on quality of life and connections to nature. The study found that outdoor recreational opportunities scored 6.9 out of 10 for Top Relocation Considerations. Workforce recruitment and retention data suggesting that growing outdoor recreation amenities and opportunities is highly desirable. Recent local stakeholder workgroups have cited lifestyle and connections to nature as two key assets driving individual decisions in relocation. As quality of life becomes essential in making household decisions, proximity to nature and the infrastructure to interact in nature has become increasingly important. Quality of life workgroups and workforce recruitment departments for major employers in the region have cited outdoor recreation access and development as a key attraction initiative to support their efforts. There's also been demand identified through tourism organizations and local non-profits.

"For individuals interested in relocation and motivated by quality of life considerations, the Southern Finger Lakes is the place to be. Nestled in the hills and valleys of Upstate New York, The Southern Finger Lakes offers a relaxed pace of life, an environment that promotes a healthier mindset, lower housing costs and less time spent commuting, which means more time, energy and resources to prioritize what is really important. The Southern Finger Lakes is also a vacation destination, which means access to the same amazing experiences others travel for, are in your backyard everyday. The Southern Finger Lakes is ideally situated for those who want to be in proximity to large metropolitan areas, but live a life made far richer by connecting to nature and community, making a difference in the lives of their neighbors and taking advantage of the opportunity to develop a lifestyle that ideally suits who they are."

4.1.12 **I86 Innovation Corridor Strategic Action Plan**

The I86 Corridor Project Stakeholder Group and the many other committed community leaders participated in workshops and interviews during the development of the I86 Strategic Action Plan. The Plan is designed to accelerate public/private investment, create job opportunities, advance regional competitiveness, and draw and keep skilled workforce.

"Strategy: Built Environment

This strategy is designed to bring renewed vibrancy to communities in the region so they will attract workers, entrepreneurs, and businesses, with both Corning and Elmira having distinct, vibrant personalities, and the central district around the airport being developed as a research and commercialization hub...

"Southern Tier Trail Network" - Develop a network of regional trails to support tourism and improve quality of life for citizens." pg. 12-13

4.2 **RELATIONSHIP TO EXISTING REGIONAL MUNICIPAL PLANS**

The project area includes eleven municipal authorities, relevant documents were reviewed identifying support and barriers for the maintenance and development of existing and future trail networks. The following plans were reviewed:

- Chemung County Farmland Protection Plan, April 2011
- Steuben County Agricultural Development Plan, April 2015
- Steuben County Farmland Protection Plan Draft, April 2015
- Town of Big Flats Comprehensive Plan, May 2006
- Village of Horseheads Comprehensive Plan, April 2010
- Elmira Chemung Transportation Council Unified Planning Work Program, April 1, 2023, to March 31, 2024
- City of Elmira Comprehensive Plan, September 2016
- City of Corning Parks Strategy, December 2020

- Elmira Chemung Bicycle Pedestrian Trail 2035 Plan, March 2015

Each plan is summarized and language that is aligned with the Chemung River Greenway is identified in green boxes, concepts that provide barriers to trail development are identified in red boxes.

4.2.1 Chemung County Farmland Protection Plan

The Chemung County Farmland Protection Plan was adopted on April 11, 2011, by the Chemung County Legislature. This is a leading program of New York State Agriculture and Markets to assist governments as they guide the future of agriculture. There is no language used that references the development of trails, however, it is emphasized in the plan to prioritize the development of agricultural land strictly for agricultural practices. Plan's stance on development within Chemung County is that viable farmland should be protected and conserved for agricultural purposes only, as outlined in the following plan recommendation:

Recommendation 2: *"Encourage the development and use of effective land use plans and programs that protect productive farmland and that direct development to land less suitable for agricultural production."*

4.2.2 Steuben County Agricultural Development and Expansion Plan

The Steuben County Agricultural Development Plan was approved in April of 2015. The purpose of this document is to emphasize the importance of agriculture in Steuben County. This plan provides an agricultural inventory, as well as goals and objectives to further support agricultural development and farmland protection initiatives in the county. In the following excerpt, the plan notes that there are unique opportunities for trails to contribute to tourism in the county.

"Forestry presents significant possibilities for generating additional tourism to the area. Recreational leasing of forest property for hunting and fishing is the most obvious economic opportunity but there are also possibilities in hiking trails, bird watching and eco-tourism." pg. 1-3

4.2.3 Steuben County Agricultural and Farmland Protection Plan

The Steuben County Farmland Protection Plan was drafted in April of 2015. The purpose of this document is to guide the future of agriculture in the county in a way that reflects the goals of the community. In Steuben County, commercial, recreational and entertainment, community, public services, and industrial land uses are mainly concentrated within the cities of Corning and Bath, and in the Town of Hornellsville. The plan indicates that it is expected that future development, specifically commercial and industrial, will continue to be established in these areas as a way to limit development in the county's agricultural areas. The following goal supports the preservation of existing farmland:

Goal 3 Farmland Preservation: *Ensure that the county's farmland remains viable and productive for future farmers.*

4.2.4 Town of Big Flats Comprehensive Plan

The Town of Big Flats Comprehensive Plan was updated in January 2021. The purpose of this plan is to set forth the vision and goals relating to the Town's community development and land use. The plan identifies five key goals. Land Use and Zoning, Policy #3 Protect Natural Sensitive Lands; Quality of Life, Policy #1 – Improve Health and Promote Active Living through Recreational Amenities: Support and increase public access to recreational and open space opportunities and Policy #3 – Provide Transportation Choices: Improve transit, biking, and pedestrian facilities, particularly in neighborhoods and other locations identified for infill development. Regional Vision, Policy #2 – Connect Local Activity Centers with Regional Destinations: Enhance connections so that residents can move throughout the region to access employment opportunities, services, and recreational amenities. The plan includes future land use character areas including a conservation corridor along the Chemung River, the conservation area possible land uses include parks, conservation areas, undeveloped natural areas and agricultural lands. The goal of Economic Development, Policy #3 – Community Based Economic Development includes development of a recreation economy and increase tourism through enhanced marketing and promotion of existing assets, such as the Chemung River Corridor.



Town of Big Flats Comprehensive Plan, page 53

Quality of Life, Policy #1 – Improve Health and Promote Active Living through Recreational Amenities: *Support and increase public access to recreational and open space opportunities.*

4.2.5 Village of Horseheads Comprehensive Plan

The Village of Horseheads Comprehensive Plan was published in April of 2010, and provides recommendations for goals pertaining to government effectiveness, public safety, quality of life, economic development, housing, recreation, culture and history, transportation, and natural resources. Resident survey data was collected to identify the project priorities of the community. The data showed that trails were ranked highly as a need, as 77% of survey participants agreed with the following statement: Support potential scenic trail construction that positively impacts the village.

Recommendation 6.4, Promote walking within the Village to improve health and community interaction.

Action 6.4.3. Consider creation of a system of paths and trails within the Village, perhaps by connecting Teal Park, Linear Park, Hanover Square, and Thorne Street Park.

Action 6.4.4. Investigate the potential of additional linkages to adjacent communities' paths and trails.

Action 6.4.5. Investigate opportunities for increasing the number of paths and trails within the Village and pursue funding opportunities to support the development of this network.

Recommendation 8.5, Support the development of paths and trails within the Village.

Action 8.5.1. Promote walking within the Village to encourage healthy lifestyles and to encourage community interaction.

Action 8.5.2. Create a network of trails and paths throughout the community to link and improve accessibility to recreational, cultural, commercial, and ag resources.

Elmira Chemung Transportation Council Unified Planning Work Program

The Elmira-Chemung Transportation Council (ECTC) has served as the Metropolitan Planning Organization (MPO) for the Elmira urbanized area since December of 1974. As the MPO, ECTC is responsible for the planning and programming of all major transportation projects. The purpose of a Unified Planning Work Program is to identify working schedules, planning processes, programming, and financing of priorities relating to all forms of multi-modal transportation. ECTC has finalized the Unified Planning Work Program (UPWP) for April 1, 2023, to March 31, 2024.

ECTC has been instrumental of the development and implementation of the existing Lackawanna Rail and the Catharine Valley trails. Future trail connection work has been identified in the UPWP as a short-range planning effort. Authors have created the following planning factors toward the effort:

- Economic vitality
- Accessibility and mobility
- Environment and quality of life
- Integration and connectivity
- Preservation of existing system
- Resiliency
- Travel and tourism.

The UPWP also offers the following work plan actions for bicycle and pedestrian facilities and programs:

Action 1. *Coordination of BACPAC, the Tri-county (Chemung, Steuben and Schuyler) bicycle and pedestrian advisory committee. The group identifies, prioritizes, and helps to progress projects to facilitate more and safer bicycling and walking in the region.*

Action 2. *Work with groups such as Friends of the Catharine Valley Trail and Lackawanna Rail Trail Committee to establish a work plan for regional trail network development, building on the success of these trails. ECTC is developing a Request for Qualifications for a consultant study of the Catharine Valley Trail connection to the Lackawanna Trail. ECTC will fund the study with the expectation that a suitable connection between the 2 trails can be identified. The completion date for the study is Spring of 2024.*

Action 3. *Continue to assist Chemung County with the design and construction of the North-South Bicycle-friendly corridor, funded in part by a TAP grant in 2019 (from Davis Street in Elmira to Village of Horseheads.*

Action 4. *ECTC has been instrumental in the development of two regional trails (Lackawanna Rail Trail and Catharine Valley Trail) and will continue its work on both. Staff will continue to work with municipalities and the City's Lackawanna Rail Trail Committee to identify projects to improve the trail. Staff will also continue to provide support to the Friends of Catharine Valley Trail and NYS Office of Parks, Recreation and Historic Preservation (OPRHP) to promote the trail and advocate for completion of the final trail elements in Chemung County.*

4.2.6 City of Elmira Comprehensive Plan

The City of Elmira Comprehensive Plan was published in September of 2016. This document is as an update from the original 1998 plan and serves as a roadmap to reflect the current community vision and goals for revitalization. The plan addresses various conditions and implications such as population and jobs, housing, community identity, leadership, infrastructure, and community assets. In a section dedicated to trails in the city, the authors acknowledge the importance of greenways and trail systems as a means to encourage good public health practices, economic development, and transportation benefits.

"They make our communities more livable and create connections between neighborhoods, schools, and parks. They can work as low-cost infrastructure for economic development through urban revitalization, recreational tourism, and small business opportunities" pg. 35.

4.2.7 Corning Parks Strategy

The Corning Parks Strategy was published in December of 2020 to provide an overview of the existing conditions of the park systems in the City of Corning, while offering objectives that are sustainable, connected, economical, balanced, and equitable. The document provides park system, park amenity, and individual park recommendations. This plan also offers funding opportunities through various state and federal agencies to support the planning, development, and enhancement of parks and trails.

The Corning Parks Strategy includes guidance for considerations that must be carefully examined while developing a riverside trail.

"While sidewalks, bicycle facilities, parks and trail systems may have once been perceived as 'amenities' or 'luxuries', they are now being recognized as essential components of our daily lives." pg. 122

"Formalize pathway(s) along the Chemung River. *There are currently several informal trails along the Chemung River, including a paved leveetop section along William Street and Hillvue Parks, as well as an informal path on the river floodplain. The community has long supported the creation of formalized trails along the Chemung River; the 2010 Local Waterfront Revitalization Plan for Corning and several adjacent communities focused primarily on outlining proposed locations for potential waterfront paths. This support is ongoing, as evidenced by 98% of attendees at Public Open House #1 indicating that they would like to see such a trail constructed." pg. 67*

"However, the process towards further implementation of any trail must recognize the ecological, structural, economic, legal, and recreational factors that are integral to the project, and must carefully balance the considerations of several stakeholders, many of whom have been engaged in the development of this plan. These stakeholders include: the City of Corning; the New York State Department of Conservation (DEC); the Army Corps of Engineers; Southern Tier Central Planning, who authored the 2010 LWRP document; and the Friends of the Chemung River, a group with experience creating river-side trails in nearby communities. Specifically, the following considerations must be carefully examined while developing a riverside trail(s):

- » Public safety concerns regarding access to open water, frequent and rapid flooding along the river, and insufficient access for emergency vehicles.*
- » Structural integrity of the levee, which was constructed in the 1900s to protect life and property within the City of Corning and adjacent communities.*
- » Access management restrictions during flood events, ensuring that residents stay away from the floodplain during all potentially dangerous circumstances.*
- » Maintenance plans for all new features, including responsible entities, maintenance techniques and procedures, and frequency of maintenance.*
- » Liability agreements, ensuring that all users are safe and that all entities are not held responsible for events or behavior beyond their control.*
- » Surface treatments that allow for appropriate accessibility, water and ice drainage, and maintain structural integrity." pg. 67*

4.2.8 **Elmira Chemung Bicycle Pedestrian Trail 2035 Plan**

The Elmira-Chemung Bicycle, Pedestrian, Trail 2035 Plan was completed in March of 2015, and serves as a complementary plan to the "Elmira-Chemung Transportation Plan 2035 Challenges and Opportunities." This Plan encompasses detailed opportunities and challenges for transportation modes in Chemung County. This document assesses recent planning efforts and interests, dissects transportation needs, and recommends steps to achieve a safe, complete, and attractive network for the next twenty years; this includes street, sidewalk, and trail infrastructure.

The following recommendation was made by the working groups:

Recommendation: Implementation of a multi-year Safety Education Plan.

Action 1. Working with municipalities, advocacy groups, the health care community, and other stakeholders who have an interest in improving and promoting the use of walking and bicycling.

Action 2. Prioritizing the use of the funding that becomes available to complete as many pedestrian, bicycle, and trail infrastructure projects as possible.

Action 3. Completing a well-defined trail network in Chemung County, using the completed trails as a base.

The following goal offers objectives to collaborate with regional organizations to provide robust trail networks with efficient infrastructure. The document also suggested that in order for trails to be more effective, they need to be longer, have access to public destinations, and be tailored to tourism.

Goal 3: Promote connectivity among all modes of transportation to meet the region's mobility and accessibility needs. In order to have a vibrant community, people and goods need access to their destinations. ECTC recognizes that a well-connected multimodal transportation system serves vital needs.

Objective: Identify discontinuities in sidewalks, bicycle facilities, and trails and document areas where projects are needed to create active transportation corridors.

Objective: Complete links to the trail network set forth in this plan.

Objective: Partner with advocacy groups, public agencies, health care organizations, and others to market and otherwise promote the use of walking and bicycling in Chemung County.

4.3 CONSIDERATION OF MUNICIPAL APPROVALS

4.3.1 General Municipal Law 239

Upon complete local review, New York State General Municipal Law §239M and N state that city, village, and town planning board referrals may be referred to county planning agencies or regional planning councils for further review. This is dependent upon the proposed action's potential to affect the immediate and long-range protection, enhancement, growth, and development of the state and its communities. Triggers for county review include the following:

- Adoption or amendment of a comprehensive plan
- Adoption or amendment of a zoning ordinance or local law.
- Issuance of special use permits.
- Approval of site plans.
- Approval of subdivisions.

- Granting of use or area variances.
- Other authorizations that a municipality may issue under the provisions of any Zoning Law or local law.

County review is also triggered when projects are within 500ft from the following:

- A municipal boundary
- A County or State Road, existing or proposed.
- A County or State Park or recreation area, existing or proposed.
- The boundary of any County or State-owned land on which a public building or institution is situated, existing or proposed.
- A farm operation located in County Agricultural Districts (this one provision does not apply to area variances)
- The right-of-way of any stream or drainage channel owned by the county or for which the county has established channel lines, existing or proposed.

The geographical nature of this two-county project raises the likelihood of potential intermunicipal, and countywide impact, requiring the project to go before county planning boards in Steuben and Chemung counties. An additional geographical feature to consider are the parcels that make up the certified agricultural districts in each county. Steuben County has seven agricultural districts, and Chemung County has one consolidated agricultural district. The New York State (NYS) Constitution directs the State Legislature to protect agricultural lands, which the State and its counties have done together since the implementation of Article 25AA of the Agriculture and Markets Law in 1971. This law authorizes the preservation and protection of agricultural lands and products. The purpose of agricultural districts is to encourage the use of farmland for agricultural production, while discouraging the conversion of farmland for non-agricultural uses. As mentioned in General Municipal Law §239M, if the project takes place within 500ft of a farm operation located in an agricultural district, it is required to go before county review.

The following table displays municipalities in the project area and their relevant land use boards that are responsible for reviewing projects at the local and county levels.

Table 5: Municipal Land Use Boards in Project Area

Municipality	County Planning Board	Local Planning Board/Commission	Zoning Board of Appeals
Chemung County	X		
Steuben County	X		
City of Corning		X	X
City of Elmira		X	X
Village of Elmira Heights			X
Village of Horseheads		X	X
Village of South Corning			X
Town of Big Flats		X	X
Town of Elmira		X	X
Town of Horseheads		X	X
Town of Corning		X	X

Zoning district mapping for each municipality are included in Attachment 2. Consideration of the zoning classification for existing recreational resources in each municipality is shown

in Attachment 3. The table shows both linear trails and recreational resources such as community parks. In Steuben County, the trails and greenspaces/parks are located in areas zoned for residential and public conservation. In Chemung County, the trails and greenspaces/parks are located in areas zoned for residential, business neighborhood, non-retail, lakes, ponds, and streams, town center, rural district, and conservation.

4.4 HISTORIC AND ENVIRONMENTAL REVIEW POLICIES

4.4.1 State Environmental Quality Review

The NYS Department of Environmental Conservation (DEC) is the authority organization for issuing regulations for the State Environmental Quality Review Act (SEQR). SEQR requires all local, regional, and state government agencies to examine the environmental impacts as well as the social and economic considerations for projects during their review process. If it is determined that there is a possibility that the project will have significant adverse impacts, a multistep procedure is conducted including the creation of an environmental impact statement, and a public hearing. For this project, the overall SEQR classification will be contingent upon various factors such as location, existing zoning, flood zone designation, presence of endangered species, and proximity to hazardous sites.

4.4.2 Department of Environmental Conservation Regional Environmental Permits

The NYS DEC Regional Environmental Permits office serves as the single point of contact for environmental permits required by NYS Rules and Regulations. The office recommends contacting the Regional Permit Administrator for permit assistance including pre-application meetings. Thomas Haley, the Regional Permit Officer has assigned Courtney Scoles, who will participate in project planning on behalf of the Department's Division of Environmental Permits office and will coordinate with other DEC members as needed.

4.4.3 Department of Environmental Conservation Floodplain Management

The NYS DEC Floodplain Management office has developed Floodplain Management Guidance documents and requires permitting for development within floodplains. The regional floodplain officer, James Lynch, was consulted at the time of ARC Grant Application, the following recommendations were shared, that no trail development within the maintained flood control structures is encouraged, specifically:

- No levees can be worn down by trails
- Easements do not allow for trails
- People should not be encouraged to walk and wear down the grass on flood control structures.

The project team has been directed to maintain updates and pre-application meeting with Courtney Scoles, who will coordinate with the floodplain management office as needed.

4.4.4 State Historic Preservation Office

The New York State Parks, Recreation, and Historic Preservation, State Historic Preservation Office assists communities in identifying, evaluating preserving, and revitalizing historic, archaeological, and cultural resources. In order to determine the feasibility of the project, there must be a project review and consultation process consistent with state and federal requirements.

4.5 POLICY AND ZONING CONCLUSION

Based on review of the documents in Chemung and Steuben Counties, there is a surplus of language that supports the construction of a trail and there is no language that directly challenges the basis of the project. The Chemung County Farmland Protection Plan and the Steuben County Farmland Protection Plan both express the importance of reserving farmland solely for agricultural activities. However, in Steuben County, the Farmland Protection Plan, as well as the Agricultural Development and Expansion Plan have both referenced the need to continuously promote tourism and promote local farms. Additionally, Social Capital, Regional Connectivity, Public Health, Economic Development, and Tourism were identified as potential outcomes of the development of trail networks.

4.5.1 Social Capital

The data collected for a community survey in the Village of Horseheads Comprehensive Plan determined that community members believed that trail linkages could promote community interaction in their communities. The City of Elmira Comprehensive Plan also supports trail development as a means for enhanced community interaction and overall community identity. The plan suggests that trail systems and greenways can encourage connections between neighborhoods.

4.5.2 Regional Connectivity

The Town of Big Flats Comprehensive Plan and the Village of Horseheads Comprehensive Plan recommend using trail development as a means of connectivity for a regional trail network. The Village of Horseheads suggests that a trail network would improve accessibility to regional resources. Also supporting regional connectivity is the Susquehanna Chemung Action Plan, which calls for the support of a regionally interconnected system of trails between the region's waterways that may serve as low-cost infrastructure for economic development through recreational tourism.

4.5.3 Public Health

The Village of Horseheads Comprehensive Plan, the City of Elmira Comprehensive Plan, and the Elmira-Chemung Bicycle Pedestrian Trail 2035 Plan all reference the promotion of healthy lifestyles through trail development. The Elmira-Chemung Bicycle Pedestrian Trail 2035 Plan suggests partnering with agencies, advocacy groups, and healthcare organizations to promote walking and bicycling in the community.

4.5.4 Economic Development

The Elmira Chemung Transportation Council Unified Planning Work Program, the City of Elmira Comprehensive Plan, and the Susquehanna Chemung Action Plan suggest that trails serve as a catalyst for economic development. The Elmira Chemung Transportation Council Unified Planning Work Program designated economic vitality as a planning effort for future trail connection. The City of Elmira Comprehensive Plan support the development of greenways and trail systems to encourage economic development. The Susquehanna Chemung Action Plan described trails and other recreational facilities as key elements of a sustainable local economy.

4.5.5 Tourism

The Steuben County Agricultural Development and Expansion Plan proposes that forests, which serve as a significant part of agricultural land, present significant possibilities for generating tourism for opportunities less obvious, such as trails. Support for recreational tourism is also outlined in the City of Elmira Comprehensive Plan. The Elmira Chemung Transportation Unified Planning Work Program designated travel and tourism as a planning effort for future trail connection work. The Friends of the Chemung River Watershed Strategic Plan suggests that developing the existing New York Southern Tier Water Trail is an important way to promote tourism regionally. Lastly, the Elmira Chemung Bicycle Pedestrian Trail 2035 Plan says that communities can make their trails more effective if they tailor them to tourism.

5.0 STAKEHOLDER ENGAGEMENT

5.1 STAKEHOLDER SURVEY

The project's initial stakeholder engagement began in November 2023 and was coordinated with Three Rivers Development Corporation, Chemung County, Steuben County, and various municipalities throughout each county. This stakeholder engagement was expanded to include regulatory agencies, corporate stakeholders, non-profit and community groups, education, and small business owners.

These stakeholders were provided with a brief survey to provide valuable feedback; this allowed the project team to understand what the area's trail needs are and to determine perceptions surrounding the project. There was a total of 35 respondents between 23 total stakeholder groups. While several other stakeholders were contacted, no response or comment was received, and they are omitted from the list below.

Table 6: Stakeholder Engagement Survey Responses Received

Stakeholder
Municipal Stakeholders
Steuben County IDA
Chemung County Planning
Elmira-Chemung Transportation Council
City of Corning
Town of Big Flats
City of Elmira
Chemung County / Elmira Public Works
Corporate Stakeholders
Corning Incorporated
Arnot Health
Guthrie Health
Chemung Canal Trust Company
Wegmans
Non-Profit & Community Groups
Southern Tier Central Planning

Friends of the Chemung River Watershed
Elmira Community Cycle
Southern Tier Bicycle League
Big Horn Velo
Friends of the Catharine Valley Trail
Wineglass Marathon
Upper Susquehanna Coalition – Tioga County Soil & Water
Education
Corning Community College
Corning – Painted Post Area School District
Horseheads School District
Elmira City School District
Small Business Owners
Wheels Unlimited
Gaffer District

5.1.1 Stakeholder Survey Results

All stakeholder respondents showed support for the project and expressed excitement and enthusiasm for a trail to connect Corning to Elmira. Many respondents commented on the importance of trail presence on residential quality of life and overall health benefits. They also expressed the proposed trail being an additional community asset to attract more visitors and tourism to the region, as well as improving connectivity to local existing amenities in surrounding municipalities.

Common themes emerged throughout the stakeholder engagement process. These themes were primarily supportive of the project and included specific concerns or recommendations. These themes can be summarized as follows:

Trail Maintenance

Several stakeholders expressed concern with trail maintenance logistics. This includes who maintains the trail, where financial resources to upkeep trail maintenance would be sourced from, and whether the trail would be maintained for all ages and abilities year-round.

Trail Width

Several stakeholders expressed concern with having a trail that is too narrow for all trail user types, especially at peak usage times. They strongly suggested considering the construction of a trail with ample width and appropriate pavement markings for designated space for bicyclists and pedestrian use.

Safety and Security

Stakeholders expressed safety and security concerns in two different ways. First, they identified the need for adequate trail lighting for improved visibility and spatial awareness. Second, they identified the need for safe crossing of roadways at trail roadway overlaps to ensure that motorists have full awareness of potential crossing trail users and result in fewer crashes involving bicyclists and pedestrians.

5.2 STAKEHOLDER CONVERSATIONS

Following the survey, the project team initiated and responded to requests for stakeholder conversations to understand broad perspectives and ideas. The stakeholder conversations are ongoing at the time of publication of this report and will be summarized at a later date.

5.3 COMMUNITY ENGAGEMENT

Community Engagement is facilitated through the project website, [Chemung River Greenway - Southern Finger Lakes \(soflx.com\)](https://soflx.com/chemung-river-greenway/), <https://soflx.com/chemung-river-greenway/> and includes a brief description of the project, access to a community survey, access to a community mapping tool, notice of community feedback sessions, and launch points to area recreational resources. Summary of the community survey and mapping tool comments is ongoing at the time of publication of this report and will be summarized at a later date.

6.0 BEST PRACTICES

6.1 TRAIL BENEFITS

Studies show that the creation of trail systems may serve as an infrastructure mechanism to spur economic development, especially in small communities. American Trails published the 2020 Edition of Why Trails as a guide to the benefits of trails. The report states that the economic benefits of trails include job creation, local business sales, tourism and lodging, health care savings, recreational gear sales, and states that "According to the Land and Water Conservation Fund, outdoor recreation creates 6.5 million jobs. A 2019 study showed that Pennsylvania's 2,000 plus miles of rail-trails generate \$930 million annually for the state's economy." In New York State, according to the United States Department of Commerce Bureau of Economic Analysis, 2020, the state experienced \$21.1 billion in value added from outdoor recreation.

The development of the proposed Chemung River Greenway and extension of existing trails aligns closely with the New York State Parks, Recreation, and Historic Preservation 2021 Final Statewide Greenway Trails Plan & Final Generic Environmental Impact Statement. According to that statement, "the Statewide Greenway Trails Plan envisions a network of shared use paths that provide all New Yorkers and visitors, opportunities for healthy and active recreation, routes for alternative transportation, and the ability to connect to and enrich our communities and natural landscapes in urban, suburban, and rural settings." Goal 7 in the plan is to "enhance bicycle and pedestrian transportation options by connecting greenway trails and communities". The plan also discusses the many benefits of greenway trails, including improved health and happiness, better emotional health, access and equity for underserved populations, economic and environmental gains, enhanced tourism opportunities, and strengthened community identity.

6.1.1 Outdoor Recreation and Education

Across the nation, communities are investing in multi-use trail infrastructure. The newly completed Empire State Trail demonstrates the growing interest in connecting residents and visitors to the natural, cultural, and historic assets of the state. The proposed Chemung River Greenway multi-use trail will link the population centers of Corning and Elmira,

provide a safe and enjoyable outdoor recreation opportunity, encourage healthy lifestyles, support small scale economic development, and contribute to the development of a local, nonmotorized transportation route which will help to address social equity. Additionally, as we seek to promote our region's quality-of-life for workforce recruitment and retention, the creation of a multi-use trail asset would greatly enhance our community's overall livability.

6.1.2 Health and Wellness

Studies have consistently shown that access to trails and greenways have a positive correlation with health and wellness within a community. Trails can improve the health and well-being for residents and visitors of all ages and abilities through increased participation in healthy lifestyles and exercise. The act of regular exercise can reduce the likelihood of heart and respiratory diseases and provide an overall improvement on quality of life.

In the 2020 article, *Designing Activity-Friendly Communities*, the Centers for Disease Control and Prevention states "Creating or modifying environments to make it easier for people to walk or bike is a strategy that not only helps increase physical activity, but it can also make communities better places to live. Studies show more people bike and walk in communities where improvements have been made, such as adding safer sidewalks, pedestrian crossings, and protected bike lanes. In addition, when people move to neighborhoods that are designed to promote physical activity and active transportation, they tend to spend less time in their cars and more time walking for transportation. Making walking easier can also help communities by improving safety, increasing interaction between residents, improving local economies, and reducing air pollution."

6.1.3 Workforce Attraction and Retention

The Southern Finger Lakes Quality of Life Messaging report provides data that pertains to the importance of outdoor recreation on quality of life and connections to nature. The study found that outdoor recreational opportunities scored 6.9 out of 10 for Top Relocation Considerations. Workforce recruitment and retention data suggests that growing outdoor recreation amenities and opportunities is highly desirable. Recent local stakeholder workgroups have cited lifestyle and connections to nature as two key assets driving individual decisions in relocation. As quality of life becomes essential in making household decisions, proximity to nature and the infrastructure to interact in nature has become increasingly important. Quality of life workgroups and workforce recruitment departments for major employers in the region have cited outdoor recreation access and development as a key attraction initiative to support their efforts.

6.1.4 Tourism and Economic

Beneficial economic impacts of trails generally include boosts in tourism, property value increases, and the development of new businesses, such as visitor centers, restaurants, and other outdoor recreation related product shops. To accommodate the increase in these business opportunities, trail spurs have proven to be most effective when they lead cyclists and pedestrians to town centers and downtown hubs if they are not directly adjacent to the trail.

The economic gains can manifest in several ways including increased foot traffic for small businesses and the development of new businesses along the trail itself. There are also housing developments and neighborhood revitalizations along trails as these areas become more desirable with the addition and expansion of trails. American Trails published the 2020 Edition of *Why Trails* as a guide to the benefits of trails. The report states that the economic benefits of trails include job creation, local business sales, tourism and lodging, health care savings, recreational gear sales, and states that "According to the Land and Water Conservation Fund, outdoor recreation creates 6.5 million jobs. A 2019 study showed that Pennsylvania's 2,000 plus miles of rail-trails generate \$930 million annually for the state's economy." According to the U.S. Department of Commerce Bureau of Economic Analysis, New York State experienced \$21.1 billion in value added from outdoor recreation in 2020. The industry also generated more than 240,000 jobs across the state. Across the nation, communities such as Glenwood Springs, CO, Jasper, AL, Poultney, VT, and Glens Falls, NY are implementing strategies to strengthen their Main Streets through expanding their outdoor recreation networks and assets. In turn, these efforts actively help to strengthen local economies, improve quality of life, attract visitors, generate tourism revenue, and provide opportunities in the community for better health and sustainability. USDA published the *Federal Outdoor Recreation Trends: Effects on Economic Opportunities in 2016 states*, "The most commonly recognized economic outcomes from federal recreation resources include business activity generated from spending by recreation visitors, increased property values and business attraction because of natural amenities those resources provide, and health benefits from physical activity and stress reduction."

6.1.5 Environmental Conservation

Trails benefit the environment just as much as the people they serve. They provide opportunities for conservation of natural and historic resources, habitat protection, improved water and air quality, and opportunities for people to easily access nature. Trails increase awareness of conservation efforts and promote ecological understanding. American Trails published *How Trails Benefit the Environment*, which states that trails promote natural resource management strategies that ensure environmental preservation by "providing a buffer between the built and natural environments, allowing passive recreational use and educational access to protected area, increasing the value of open space to the public by providing access".

6.1.6 Transportation and Safety

Trails provide safe recreational and commutable opportunities for all users. They provide a designated space for bicyclists and pedestrians to exist without interaction with vehicles. Safety is especially important for children, the elderly, and people with disabilities as trail utilization drastically reduces the chances of bicyclist or pedestrian involved crashes.

Additionally, trails increase accessibility and mobility by providing alternatives to people without personal vehicles or access to public transit. Creating access to low-stress alternatives to driving increases the likelihood of using active modes of transportation, like walking or bicycling, thus leading to healthier and eco-friendly lifestyles.

6.1.7 Equity

The NYS Parks, Recreation and Historic Preservation Greenway Trail User Survey Results and Analysis of 2021 provides statewide data regarding current use and preferences for greenway trails. In the state, 48% of respondents identified proximity or ease of access as the reason why a greenway trail is a favorite. Close gaps and increase connectivity of greenways was identified as very important to 63% of respondents. Other respondents raised issues of justice, equity, diversity, and inclusion for communities of color and disadvantaged groups, a subject of increased interest regarding outdoor recreation.

The Pedestrian and Bicycle Information Center published April 2016, Pursuing Equity in Pedestrian and Bicycle Planning Report for the US Department of Transportation and the Federal Highway Administration. The report states,

"Traditionally underserved populations may have a greater need for safe facilities for walking and wheeling compared to other groups. These research findings provide evidence of the particular needs of underserved populations and highlight the importance of providing safe facilities for nonmotorized travel:

- Twenty four percent of Americans living in poverty do not own a vehicle (7). Many people in the U.S., in particular traditionally underserved populations, suffer from problems associated with inactivity, many of which could be addressed through improved access to safe walking and wheeling facilities (8).
- Low-income, minority, or immigrant individuals are more likely to have jobs that cause them to commute outside of traditional '9 to 5' hours, often in the dark and when public transit services are not operating (9, 1).
- Children, older adults, and individuals with physical or cognitive disabilities may be unable to drive and are, thus, more reliant on nonmotorized travel modes. At the same time, these individuals may also face challenges that make them less able to take advantage of sub-par pedestrian and bicycle facilities than people without such challenges (11).
- Residents of underserved communities are less likely to live near or travel along roads with safe, accessible, and high-quality pedestrian and bicycle facilities (1, 9, 10, 19, 20). Where appropriate pedestrian and bicycle facilities do not exist, individuals are more likely to be exposed to walking or wheeling along roadways with higher traffic speeds, volumes, and ground-level air pollution (18). The risk of crashes with motorized vehicles increases when pedestrians are forced onto substandard or nonexistent facilities (8, 20- 24).
- According to a recent survey by Active Living by Design, low-income respondents were twice as likely to report that fears about safety were major obstacles to traveling using nonmotorized modes (25). Because low-income individuals are less likely to own a car, they are more likely to walk, wheel, or bike, even when conditions are not safe and are, therefore, exposed to more risk of injury (26).

A focus on improving the ability of traditionally underserved communities to travel safely and conveniently by walking or wheeling is essential to achieving a balanced, equitable transportation system that can be used by everyone."

6.2 DESIGN FEATURES

The Chemung River Greenway will be a shared use path with travel area separate from motorized traffic when possible. In some cases, the Chemung River Greenway may utilize existing sidewalks and bike routes for connectivity to various areas of interest and other segments of the Chemung River Greenway. The path is intended for bicyclists, pedestrians, skaters, wheelchair users, and other users and will be designed for two-way travel of multiple user types.

The Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) is published by the Federal Highway Administration (FHWA) and defines national standards for the installation and maintenance of traffic control devices on all streets, highways, pedestrian and bicycle facilities, and site roadways open to public travel. The 11th edition of the MUTCD was published on December 19, 2023 with an effective date of January 18, 2024. In 2009, New York State developed the New York State Supplement to the National Manual on Uniform Traffic Control Devices for Streets and Highways, effective March 16, 2011. The Chemung River Greenway will follow standards defined in most current edition of the MUTCD and the New York State Supplement.

The Public Right-of-Way Accessibility Guidelines (PROWAG) is a set of guidelines developed and published by the U.S. Access Board under the Americans with Disabilities Act and the Architectural Barriers Act. PROWAG was published on August 8, 2023 with the final rule effective on September 7, 2023. These guidelines address access to sidewalks, streets, crosswalk, curb ramps, pedestrian signals, on-street parking, and other components of public right-of-way. PROWAG also includes guidance for shared use paths designed for pedestrians and bicyclists as the primary users. When possible with terrain and other constraints, the Chemung River Greenway will implement trail segments compliant with PROWAG to allow accessibility to users with disabilities.

The Empire State Trail Design Guide is a document that was developed in 2017 to provide tools, references, and standards for stakeholders involved with permitting, designing, and constructing the 750-mile bicycle and pedestrian path spanning New York State. The Design Guide was primarily developed for state agencies, local governments, engineering design firms, and trail organizations, but can be used as a resource for anyone interested in learning more about the Empire State Trail. This compilation of guidelines and standards for shared use trails utilizes standards outlined by AASHTO, Americans with Disabilities Act, Association of Pedestrian and Bicycle Professionals, Architectural Barriers Act, Federal Highway Association, International Dark Sky Association, National Association of City Transportation Officials, and the National Park Service. The Chemung River Greenway will follow the standards and guidelines referenced in the Empire State Trail Design Guide.

6.2.1 Widths

For shared path segments separate from roadways, the standard width is 12 ft in heavy-use areas. In areas of moderate use or a low level of multiple user types, the minimum trail width is 10ft. If necessary, the trail may be constrained to 8ft for short distances only. A minimum 2ft shoulder clear of obstacles should be provided on both sides of the trail. Chemung County has established a standard trail width for multi-use trails of 12ft, with 10ft

minimum allowed if necessary. Trail segments through Chemung County will follow their standards for multi-use trails.

The Chemung River Greenway is expected to connect to existing sidewalks, bike routes, and trails. In these cases, the trail width will assume the conditions of the existing path. If a new path will be developed through existing parks or conservation lands, the standards established by the property owner and/or lead organization will be adopted.

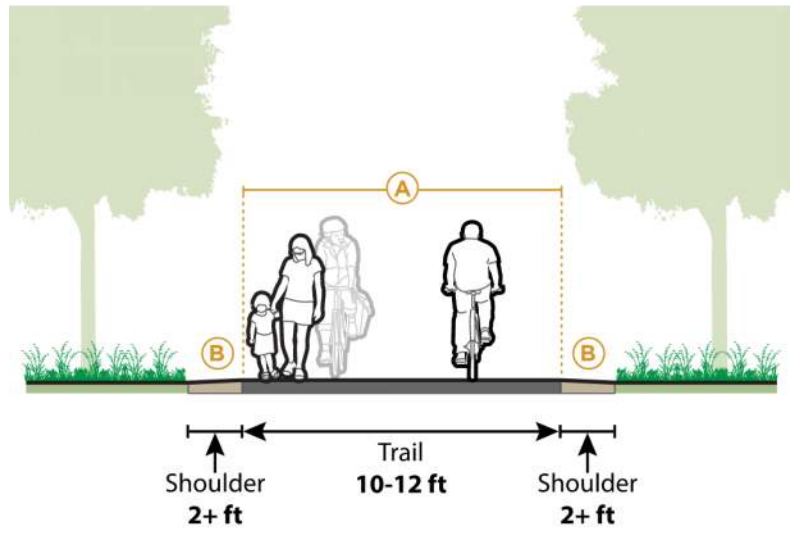


Figure 7: Typical shared use path section, 2017 Empire State Trail Design Guide, page 5-14

6.2.2 Grades

The running slope of the Chemung River Greenway should follow the slope guidelines defined in PROWAG when developing segments accessible for users with disabilities. To meet PROWAG requirements, the running slope of a shared use path outside of the highway right of way must not exceed 1:20 (5%). When the shared use path is within the highway right of way, the running slope shall not exceed 1:20 except when the grade of the adjacent street exceeds 1:20. Additional considerations include trailhead signage that provides accessibility information such as trail gradient and segment length. Parking areas for accessible trails should include at least one accessible parking space per 25 vehicle parking spaces.

The New York State Standards and Guidelines for Trails for Biking Class 1 (Greenway Trail) should be followed in areas where ADA accessibility is unable to be achieved. These standards define a running slope of 0-5% maximum, 5-10% sustained, and 15% for segments shorter than 50ft.

A cross slope of 2% will allow for positive drainage on paved surfaces. The shoulders may be sloped up to 1:6 (16.67%), though 2% is preferred. The cross slope for accessible paths must not exceed 2%. The Empire State Trail Design Guide recommends a design of 1.5% cross slope to account for variations in construction tolerances.

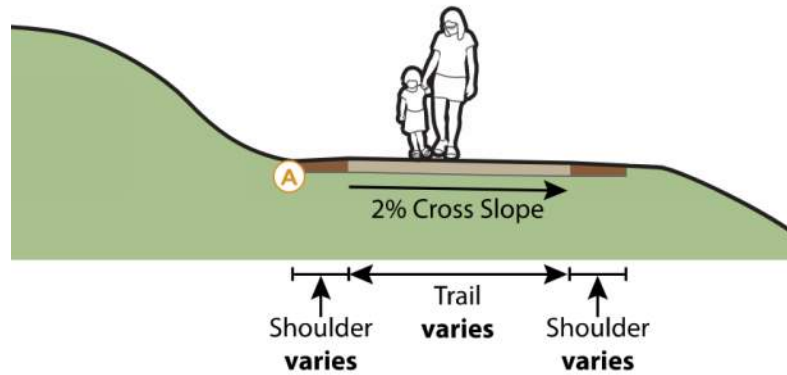


Figure 8: Drainage and Erosion Control, 2017 Empire State Trail Design Guide, page 5-30

6.2.3 Surface Materials

The majority of the off road sections of the Chemung River Greenway will consist of standard asphalt pavement. The shoulder should be made of firm, compacted gravel or earth to allow for safe trail departure and recovery. The trail will be designed to accommodate H-20 loads for emergency and maintenance vehicles. The Chemung River Greenway is expected to connect to existing sidewalks, bike routes, trails, and parking areas. In these cases, the materials used will prioritize cohesiveness of the existing conditions and functions. If a new path will be developed through existing parks or conservation lands, the materials standards established by the property owner and/or lead organization will be adopted.

PROWAG requires walking surfaces and associated components for accessible pathways be stable, firm, and slip resistant. Materials used on pathways intended to meet accessibility requirements must meet these characteristics.

For alternative surface materials, please refer to the 2017 Empire State Trail Design Guide.

6.2.4 Barriers and Design Features

Barriers are expected to be utilized in various capacities along the Chemung River Greenway to serve a variety of functions. Trailheads will be designed to allow the passage of emergency and maintenance vehicles. Vehicle access will be discouraged without the use of bollards or gates unless site specific conditions warrant it. Access points should be equipped with clear signage delineating the pathway as a bicycle and pedestrian facility, prohibiting motor vehicle traffic. Trail amenities will be located outside of the trail shoulders in areas to minimize interference with utility maintenance and access. Barriers must comply with the recommendations and references detailed in the 2017 Empire State Trail Design Guide and installed per manufacture specifications to ensure the safety of trail users and motorists.

Generally, lighting will not be installed along the trail. Trail lighting may be incorporated to establish cohesiveness with the surrounding environment and/or when required by local

guidelines. In unlighted sections, the Chemung River Greenway will be open for use from dawn to dusk only. Trailheads will include signage for trail hours.

Utility guy-wires pose a potential hazard to trail users. A protective fence is to be installed around guy-wires that fall within 5ft of the trail. Any guy-wires that fall within the proposed trail are to be relocated. The overhead clearance for guy-wires is 16ft minimum. Any guy-wires relocated overhead are to meet the minimum clearance requirement.

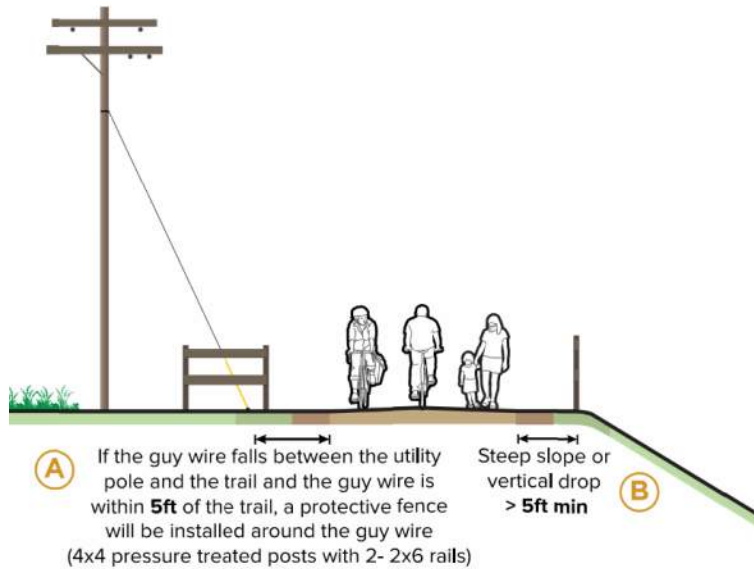


Figure 9: Typical Trail Location at Utility Pole Guy-Wire, 2017 Empire State Trail Design Guide, page 5-17

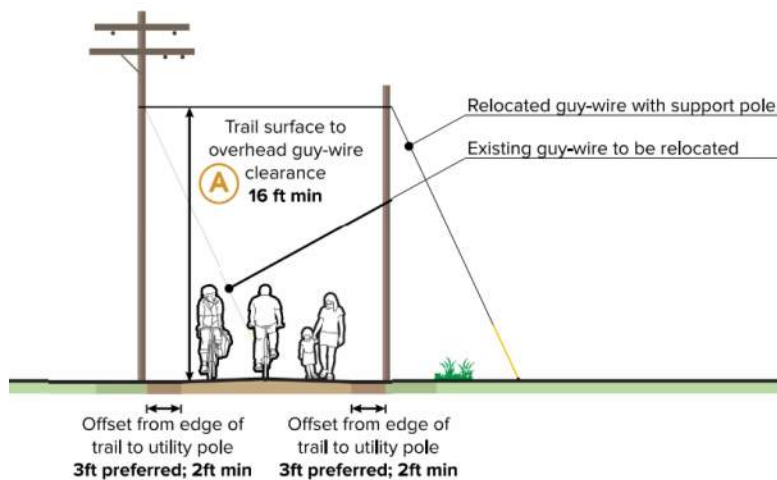


Figure 10: Typical Trail Location at Relocated Guy-Wire, 2017 Empire State Trail Design Guide, page 5-17

Steep slopes and waterways along a shared use path pose hazards to the user in the event of a trail departure. The Chemung River Greenway is expected to parallel waterways and steep slopes in some instances. When the trail is adjacent to waterways, ditches, or slopes steeper than 1:3 (33.3%), a 5ft separation between the edge of the path and the top of the slope is recommended. A physical barrier between the path and the slope should be considered if the slope is 1:2 (50%) or greater, within 5ft of the path, and has a 4ft or greater drop. Physical barriers should be installed at the top of the slope. Physical barriers to be considered include dense shrubbery, railing, or chain link fence. Aesthetics should be considered along with functionality of the physical barriers to provide a safe and welcoming experience to trail users. For additional details and references, please refer to the 2017 Empire State Trail Design Guide.

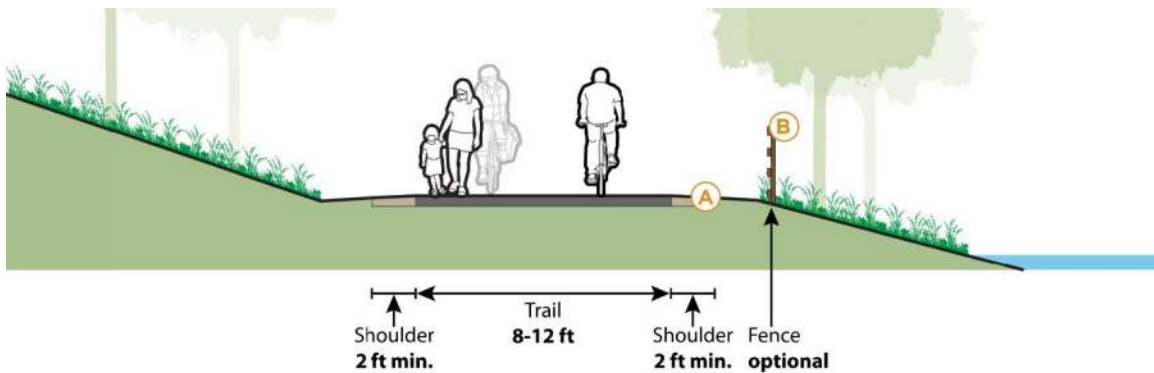


Figure 11: Typical Shared Use Paths Along Canals, 2017 Empire State Trail Design Guide, page 5-18

Clearly defining the trail edge can be achieved using vegetation, ditches, fencing, railings, walls, or ditches and aides in achieving visual and physical separation as needed. Features should be chosen based on what function they will serve. Landscaping and/or topography are recommended for barriers used solely as privacy screenings. When physical separation is needed to prevent trespassing, informal trail development, or to guard against a steep slope, the use of topography, ditches, semi-transparent fencing, and dense vegetation is recommended. Landscaping must utilize native species with no maintenance required. Railings on bridges, boardwalks, and steep drop-offs are subject to more specific guidelines, given the posed hazard. Please refer to the 2017 Empire State Trail Design Guide for additional guidance on these types of barriers.

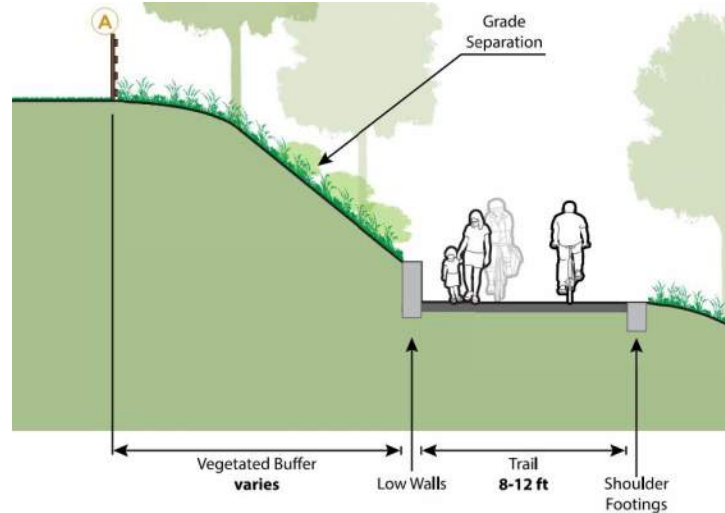


Figure 12: Trail Edge Definition, 2017 Empire State Trail Design Guide, page 5-28

Bollards serve many uses as a physical barrier and are a common type of barrier used to prevent motor vehicle traffic on trails. The use of bollards is not recommended by the AASHTO Bike Guide. The Chemung River Greenway will only use bollards in locations where there is a documented history of unauthorized vehicle passage. When bollards are to be used on handicap accessible trail segments, the installation shall not reduce the clear width of the pedestrian access path to less than 48 inches. Installation shall be in accordance with the MUTCD guidelines. The 2017 Empire State Trail Design Guide recommends utilizing bollard alternative strategies that include signage, landscaping, and curb cuts to discourage vehicle traffic but allow access to emergency and maintenance vehicles. Design features include “No Motor Vehicle” signage, a trail median at the trail entrance, and vertical curb cuts. If installing a trail median, each side of the median shall have a 7ft wide trail to allow multiple trail users and to discourage motor vehicle access. The median shall have low vegetation to allow emergency and maintenance vehicle access.



Figure 13: Bollard Alternatives, 2017 Empire State Trail Design Guide, page 5-34

Trail segments along roadways must have a clearly defined separation. Separations buffers less than 5ft are not recommended. The barrier does not need to meet specifications to redirect errant vehicles. In accordance with the AASHTO Bike Guide 2012, the barrier should be crashworthy on high speed roadways. Barriers should have a minimum height of standard guiderail and should not interfere with existing sight distances at intersections. Physical barriers shall not be installed in locations that would hinder or prohibit vehicle access to driveways or private access points.

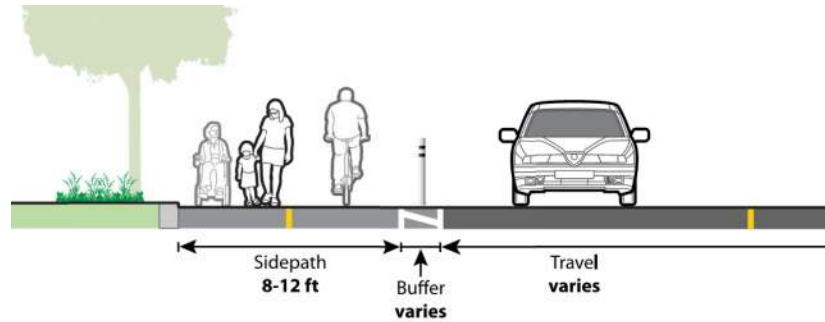


Figure 14: Constrained Conditions, 2017 Empire State Trail Design Guide, page 5-69

6.2.5 Bridges and Culverts

Trail bridges will be utilized to provide trail access over features that cannot be traversed using a culvert, such as stream and roadway crossings. Trail bridges will be designed to H-5 loading criteria with appropriate signage to allow access to emergency and maintenance vehicles. Emergency and maintenance access points will be determined during the planning stages to ensure each segment is accessible to the necessary vehicles and equipment. Shared use bridges should have a clear width of 12ft according to the NYSDOT Bridge Manual. A minimum 10ft vertical clearance should be maintained for emergency and maintenance vehicle access.



Figure 15: Trail Bridges, 2017 Empire State Trail Design Guide, page 5-36



Figure 17: Full Traffic Signal Crossing, 2017 Empire State Trail Design Guide, page 5-56

Grade separated crossings link areas separated by barriers such as major transportation corridors, railways, and waterways and can be accomplished using an overcrossing or undercrossing depending on the need and site characteristics. These systems allow trail continuity for users and added safety of trail users and motor vehicles. Overcrossings require 10ft headroom and the clearance below the structure is dependent on the feature being crossed. Undercrossings require a minimum height of 10ft and a 1.5:1 width to height ratio is recommended.



Figure 18: Grade Separated Crossings, 2017 Empire State Trail Design Guide, page 5-58

7.0 NEXT STEPS

The Chemung River Greenway Feasibility Study will continue you with following steps and will conclude with a Final Feasibility Study.

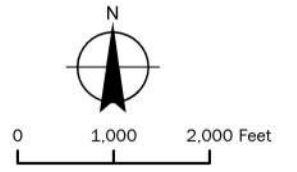
- Community Engagement
- Identification and Evaluation of Alternatives
- Implementation Strategy
- Final Feasibility Study

Appendix A: Project Location Maps



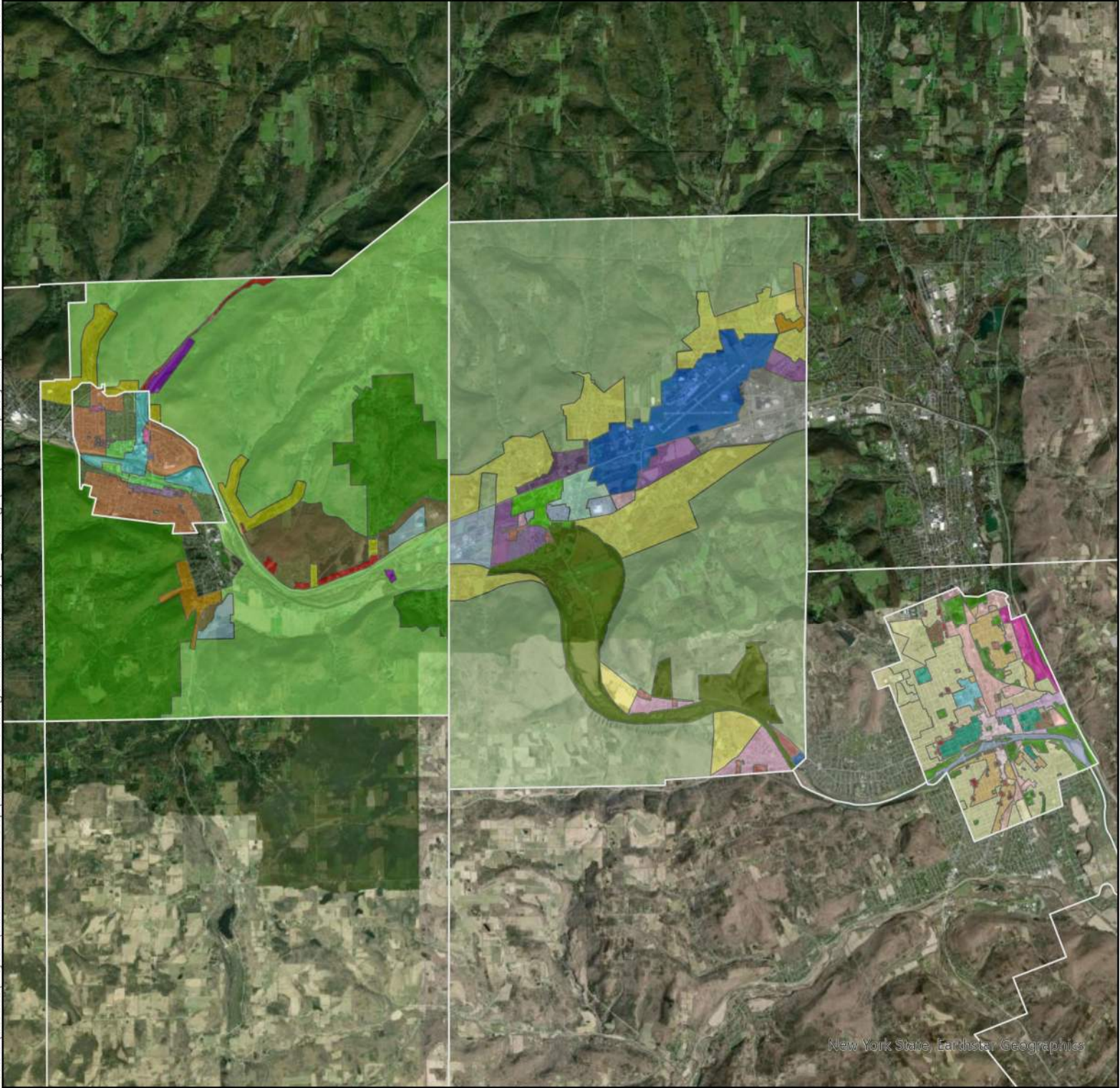
**Three Rivers
Development
Corporation**

**Chemung River
Greenway**



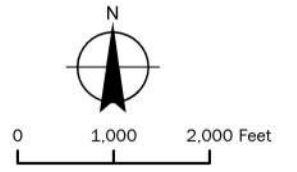
Date: November 2023

Project Area



Three Rivers Development Corporation

Chemung River Greenway



Date: November 2023

Zoning

Appendix B: Site Suitability Analysis



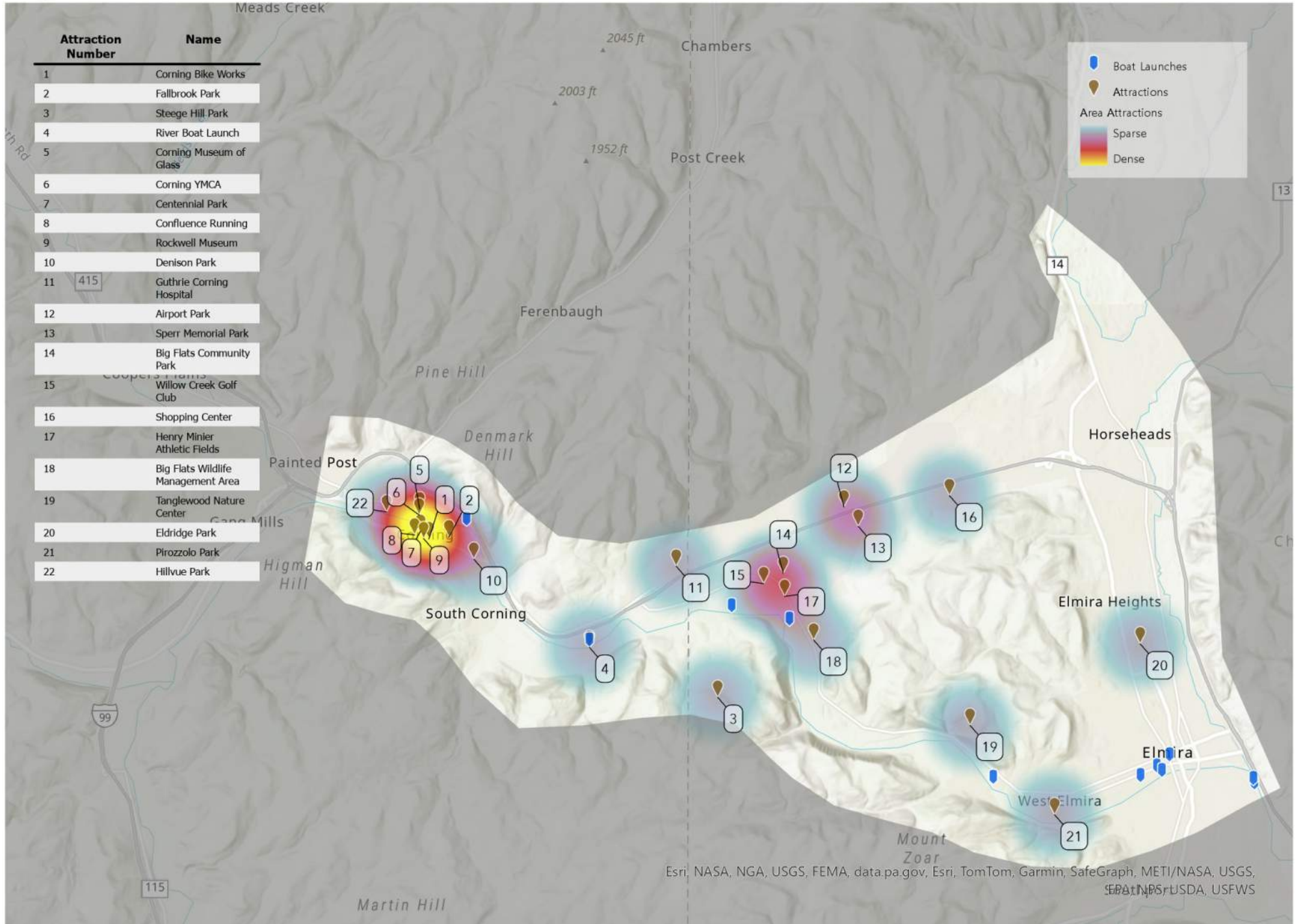
Area Attractions



Attraction Number	Name
1	Corning Bike Works
2	Fallbrook Park
3	Steege Hill Park
4	River Boat Launch
5	Corning Museum of Glass
6	Corning YMCA
7	Centennial Park
8	Confluence Running
9	Rockwell Museum
10	Denison Park
11	Guthrie Corning Hospital
12	Airport Park
13	Sperr Memorial Park
14	Big Flats Community Park
15	Willow Creek Golf Club
16	Shopping Center
17	Henry Minier Athletic Fields
18	Big Flats Wildlife Management Area
19	Tanglewood Nature Center
20	Eldridge Park
21	Pirozolo Park
22	Hillvue Park

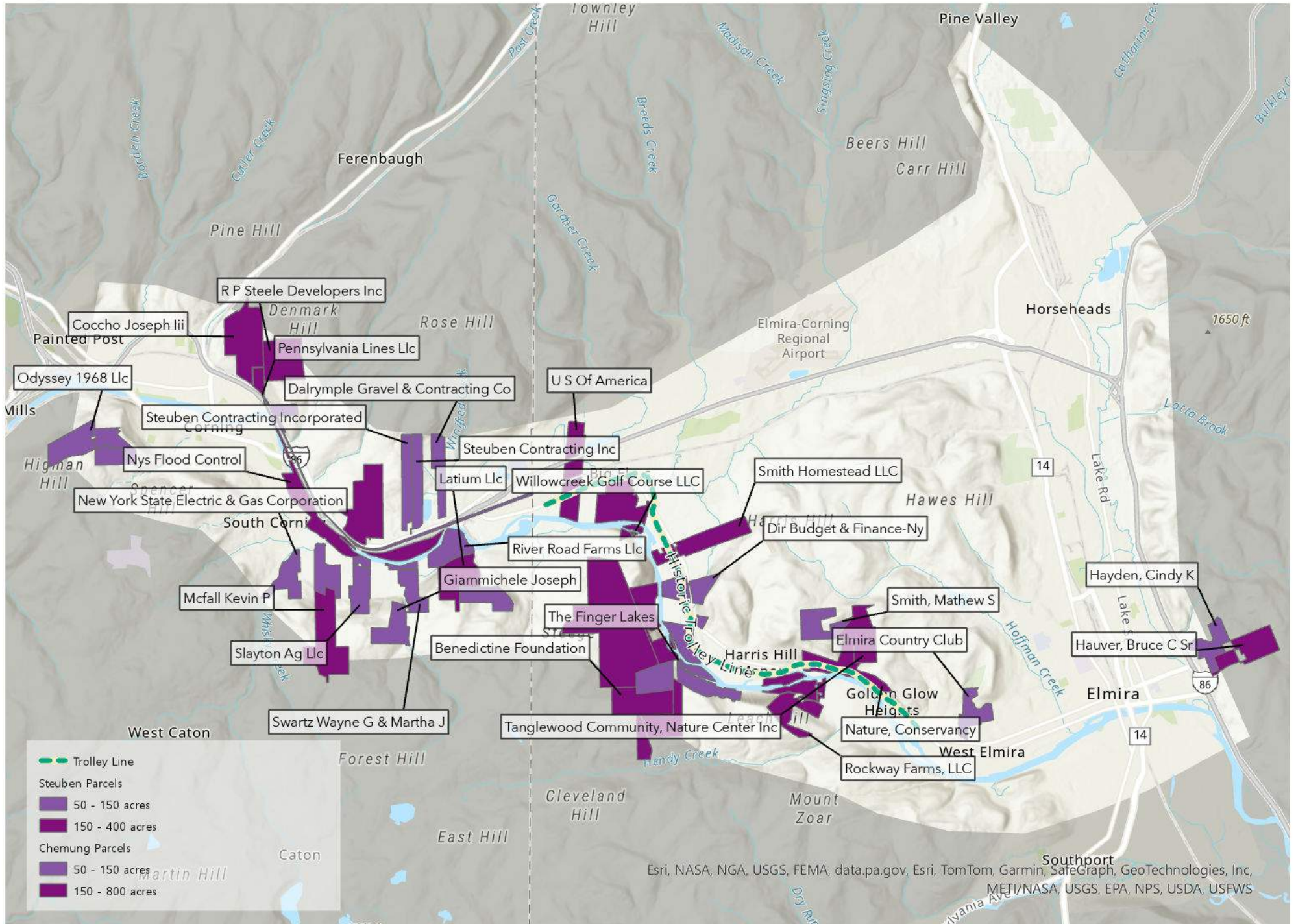
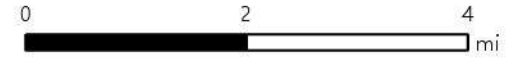
Legend

- Boat Launches (Blue icon)
- Attractions (Brown icon)
- Area Attractions
 - Sparse (Light blue/purple gradient)
 - Dense (Red/yellow gradient)





Large Parcels and Ownership



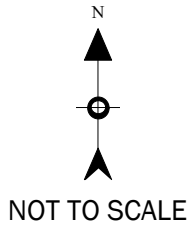
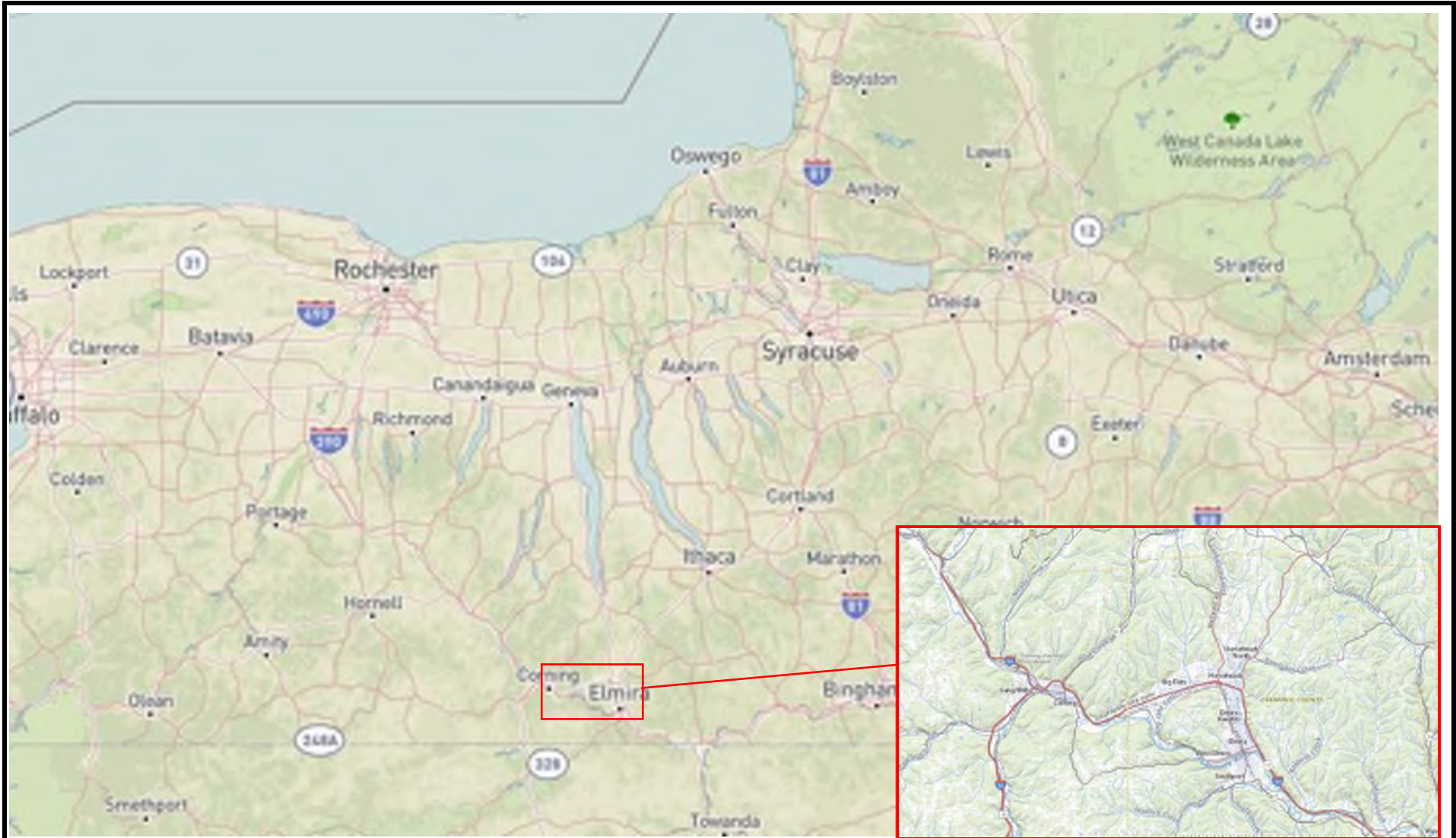


Low Slope Areas



Esri, NASA, NGA, USGS, FEMA, data.pa.gov, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, NPS, USDA, USFWS

Appendix C: Community Profile






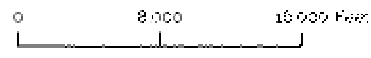
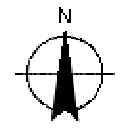
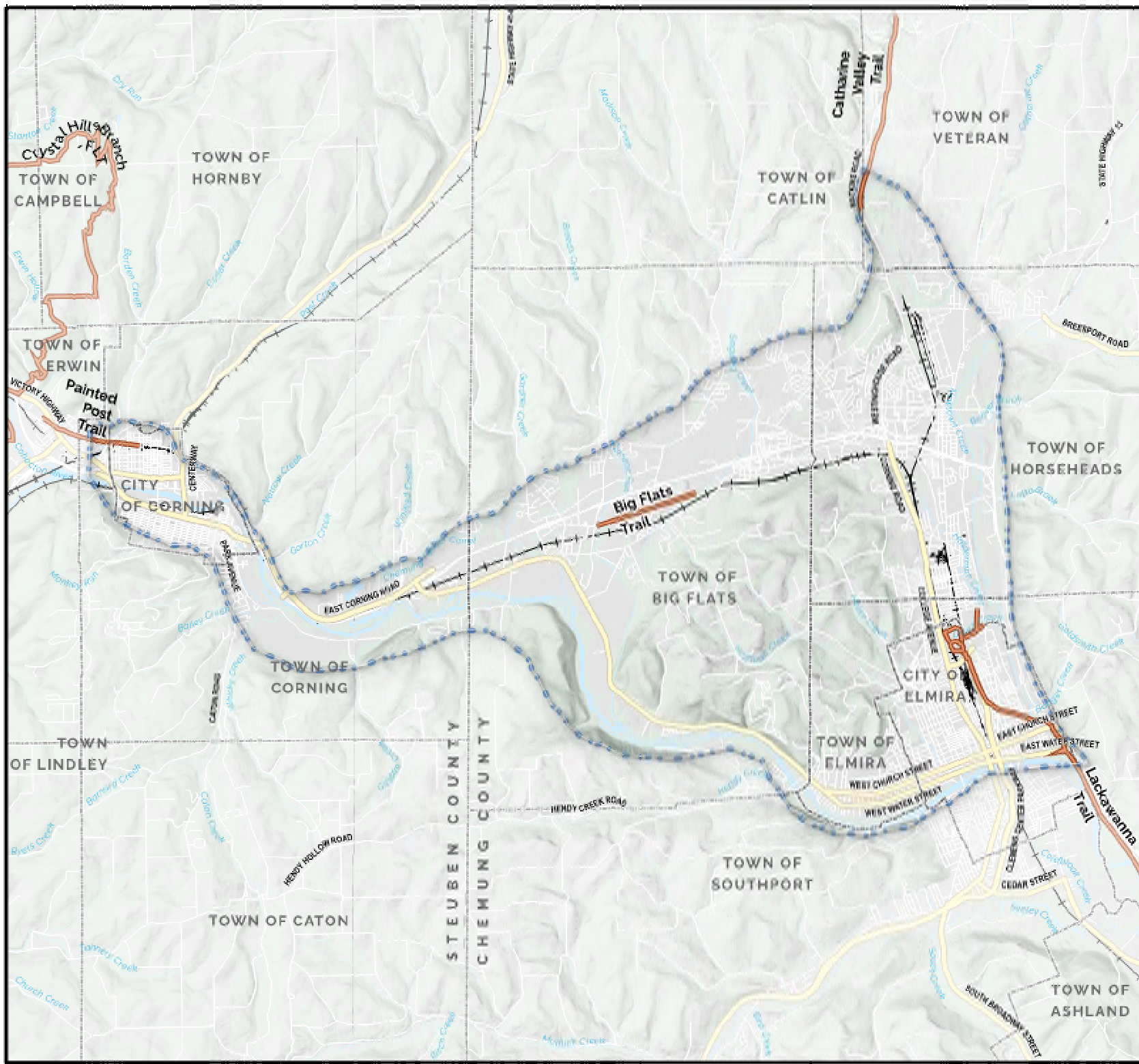
PROJECT LOCATION
 USGS topoView
 Three Rivers Corning to Elmira
 Multi Use Trail Planning



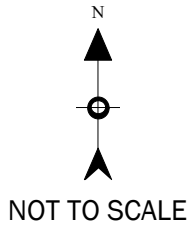
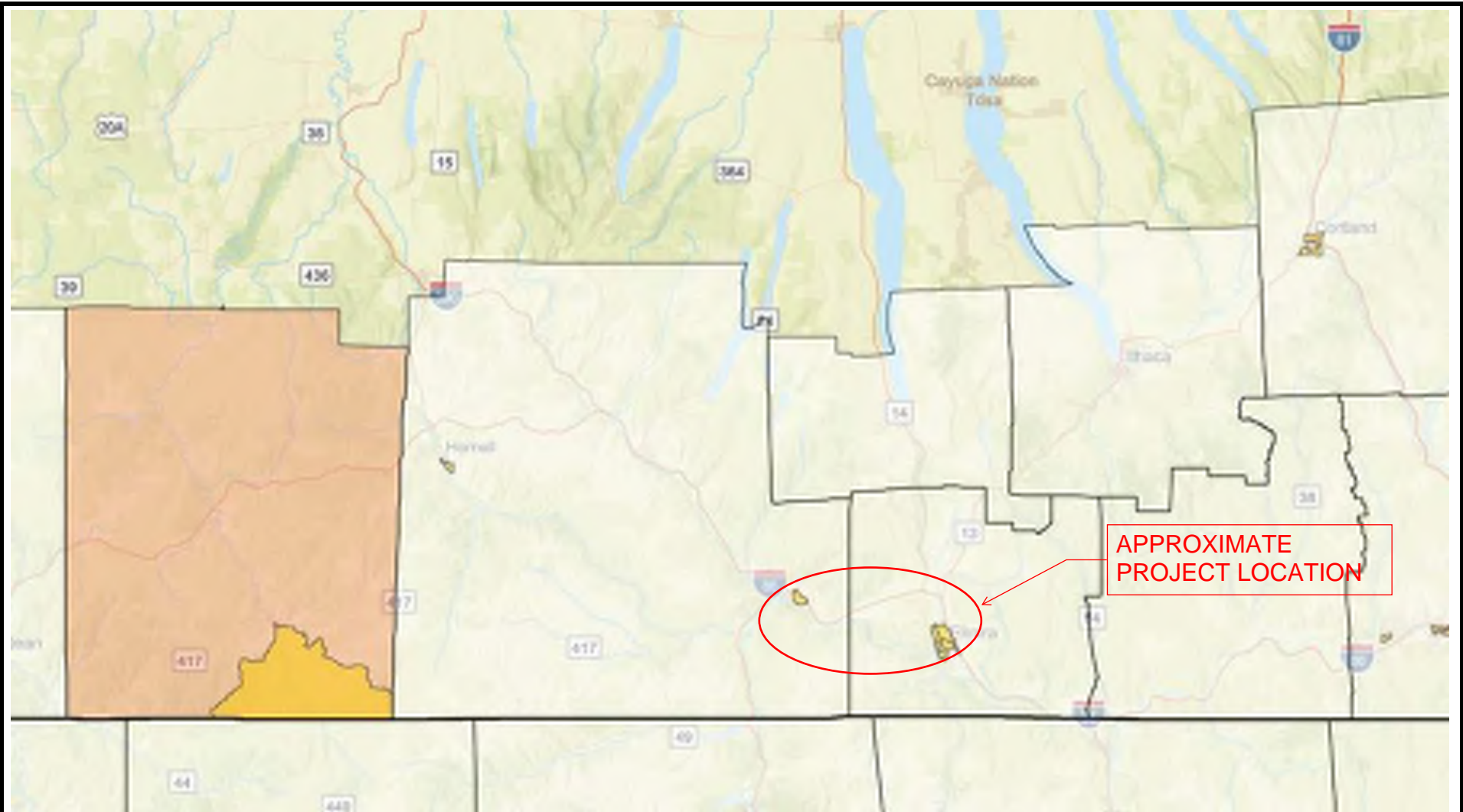
PROJECT NO. 2223456

Three Rivers Trail Plan

-  Existing Trail Network
-  Rail Track
-  Approximate Potential Project Area



Existing Network



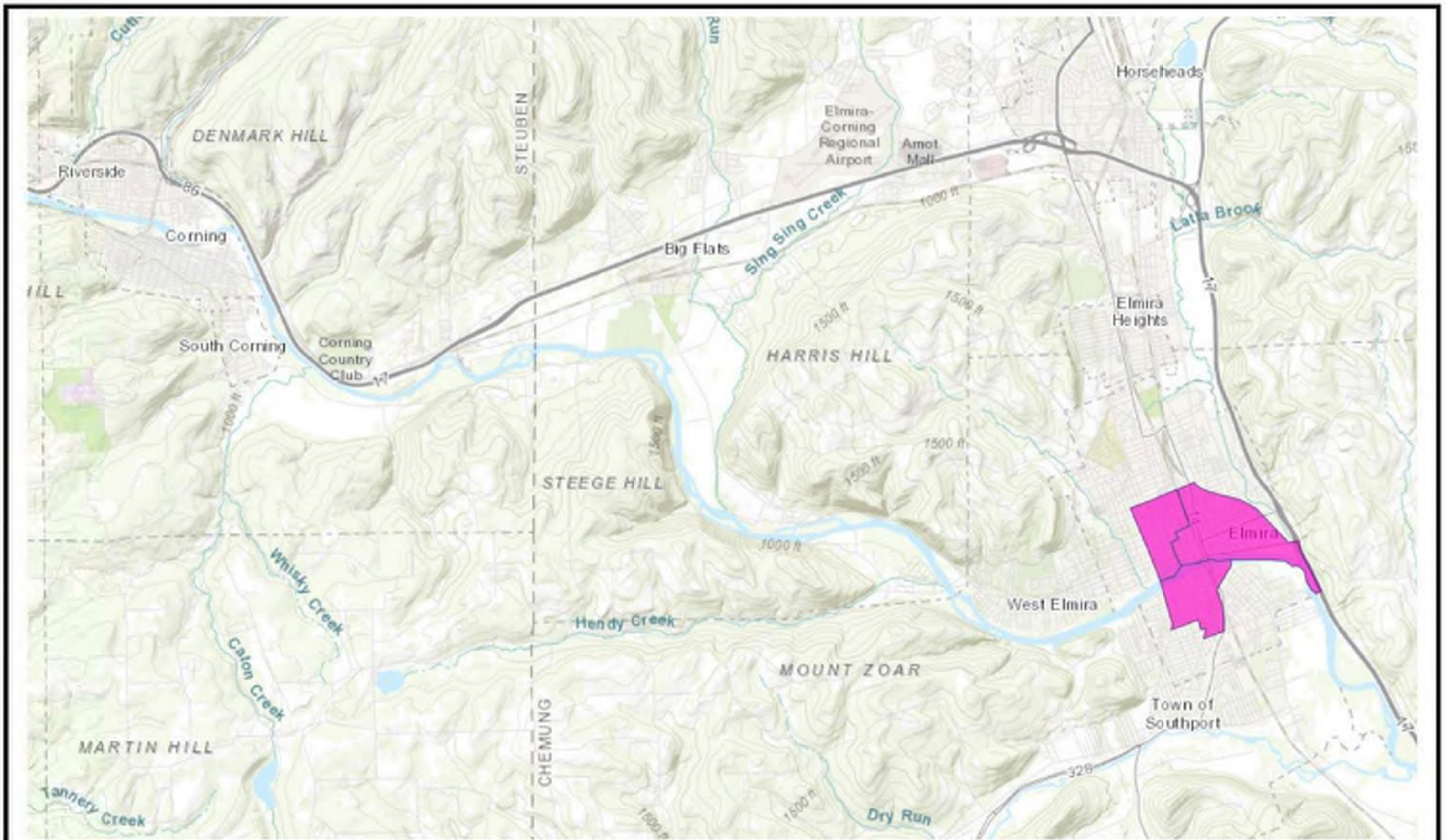
COUNTY ECONOMIC STATUS AND DISTRESSED
AREAS

ARC FISCAL YEAR 2022

Three Rivers Corning to Elmira
Multi Use Trail Planning



PROJECT NO. 2223456

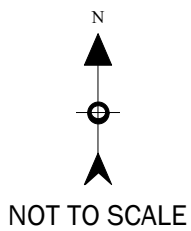
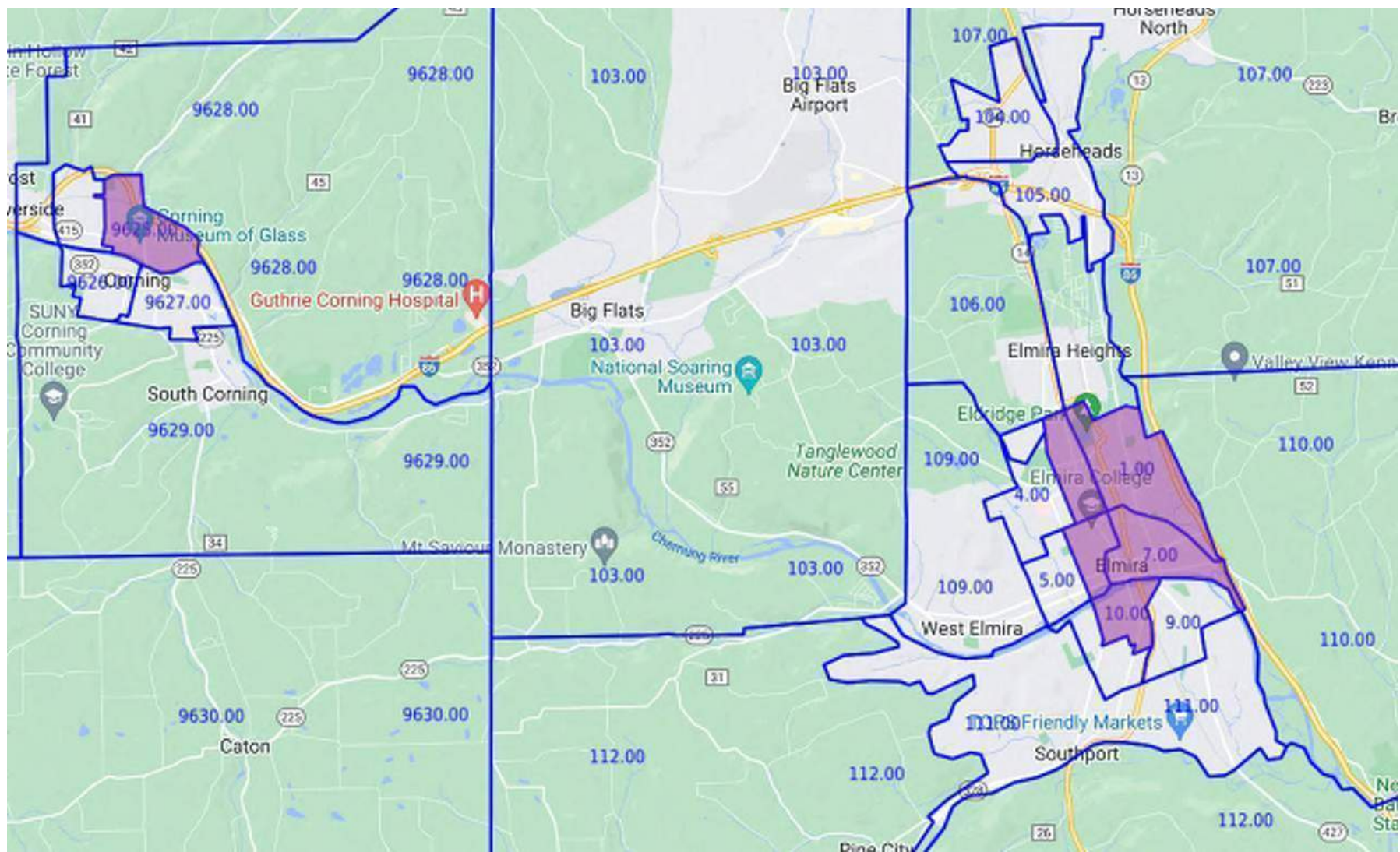


FEDERAL OPPORTUNITY ZONE MAP

Three Rivers Corning to Elmira
Multi Use Trail



PROJECT NO. 2223456



HUD 2022 QCT
 QUALIFIED CENSUS TRACT MAP

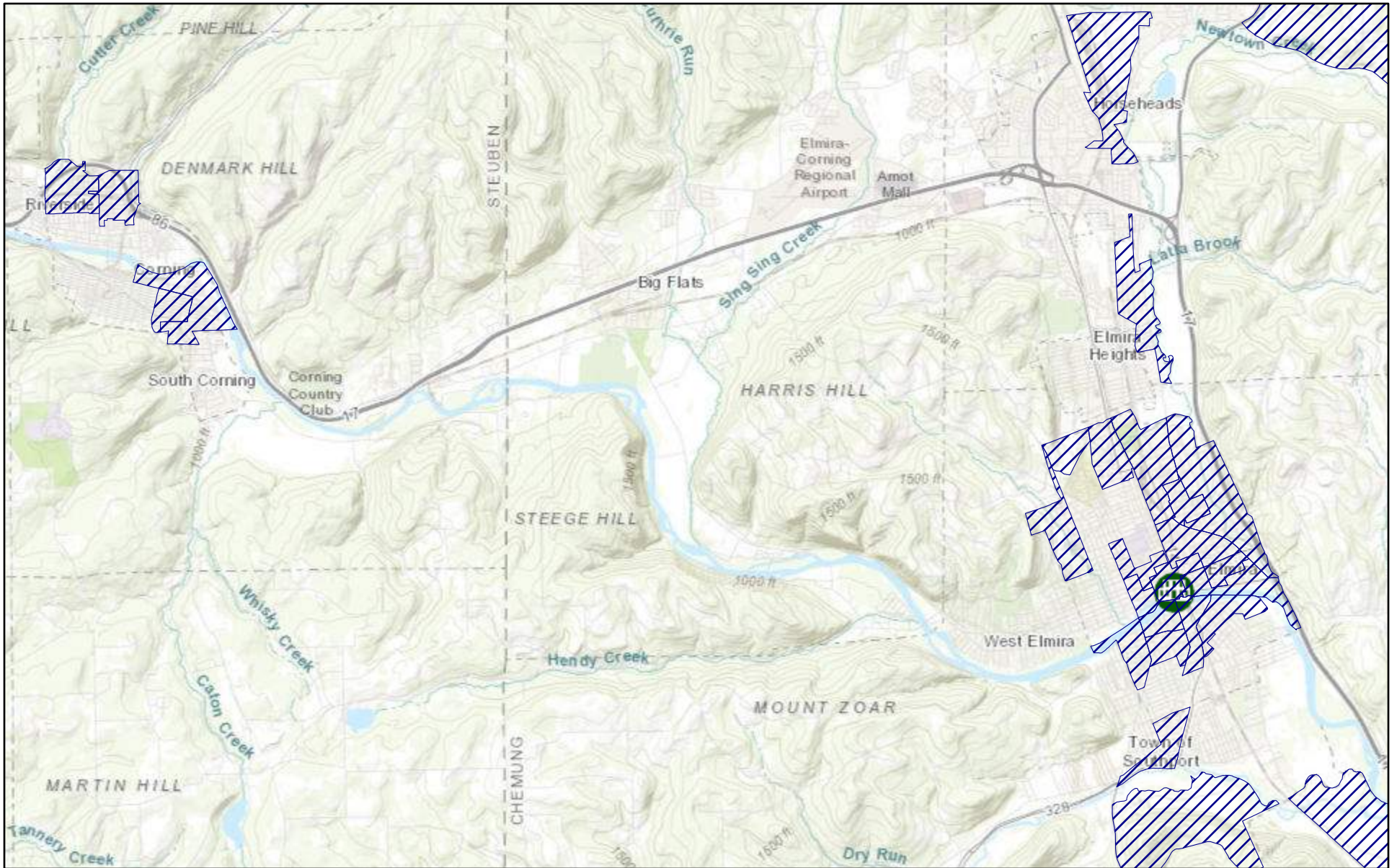
Three Rivers Corning to Elmira
 Multi Use Trail



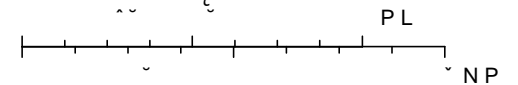
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Appendix D: Existing Conditions Maps and Resources

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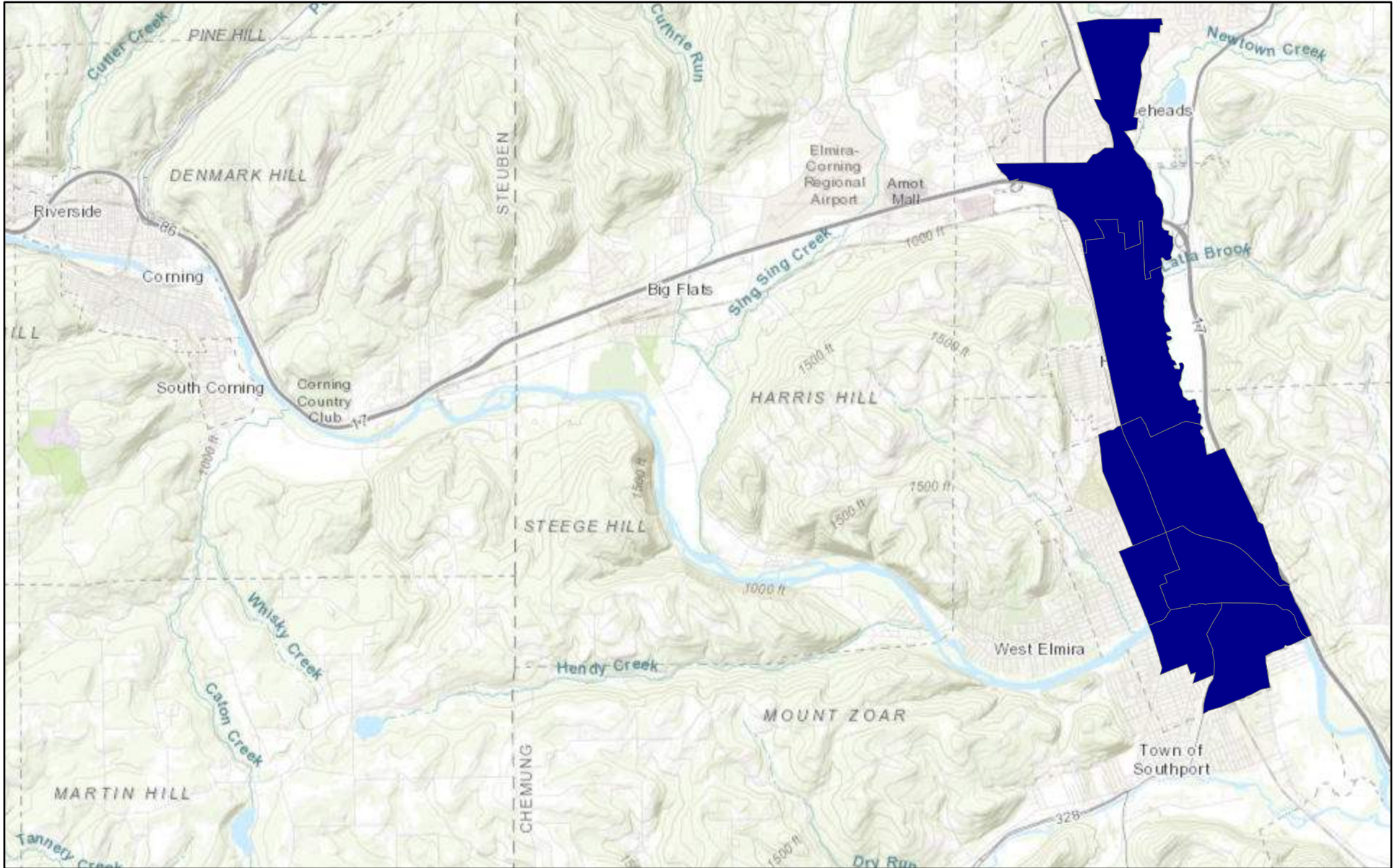
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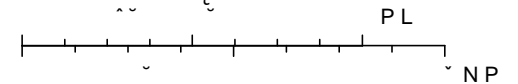
Table 3.1.4: Environmental Justice Area

Census Block Group	Percentage Below Poverty Level	Percentage Minority Population	Rural/Urban
360150001001	34.21	19.75	Rural
360150001002	48.58	32.93	Urban
360150001003	62.00	30.51	Urban
360150002001	41.32	23.01	Urban
360150003001	0.00	66.15	Urban
360150004002	40.59	17.00	Urban
360150006002	31.65	50.43	Urban
360150006003	53.24	25.04	Urban
360150007001	29.89	11.63	Urban
360150007002	51.22	25.37	Urban
360150007003	67.91	27.46	Urban
360150007004	74.85	41.13	Urban
360150009001	38.01	21.39	Urban
360150010001	31.22	29.92	Urban
360150010002	49.27	24.58	Urban
360150010003	31.54	30.43	Urban
360150011002	13.03	27.82	Rural
360150108002	27.35	1.20	Rural
360150111003	25.52	0.00	Urban
361019624002	23.59	4.53	Urban
361019625001	38.70	3.78	Urban
361019627001	24.39	14.43	Rural
361019627003	26.76	5.88	Urban

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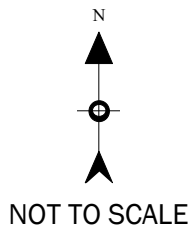
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Table 3.1.5: Disadvantaged Communities

Census Tract Number	Environmental Burden (%)	Population Vulnerability (%)
36015000100	79	92
36015000200	12	75
36015000600	16	93
36015000700	56	92
36015000900	48	65
36015001000	16	80
36015010500	80	51
36015010800	65	73



-  The Nature Conservancy Lands - Frenchman's Bluff Preserve
-  Tanglewood Nature Center - Frenchman's Bluff Conservation Easement

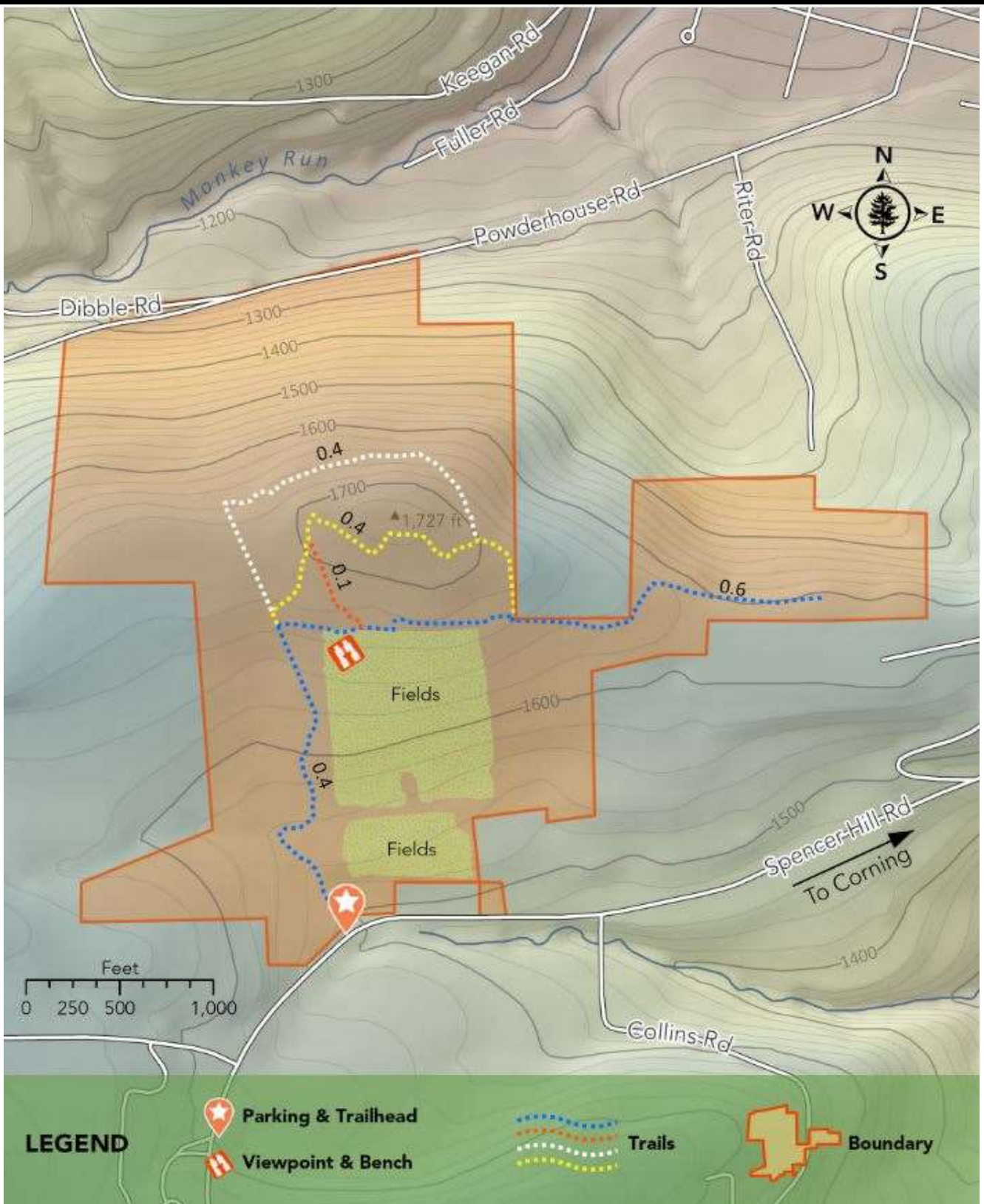


Frenchman's Bluff Preserve Map
The Nature Conservancy

Town of Big Flats
CHEMUNG COUNTY, NY



Corning to Elmira Trail Study
PROJECT NO. 2233983

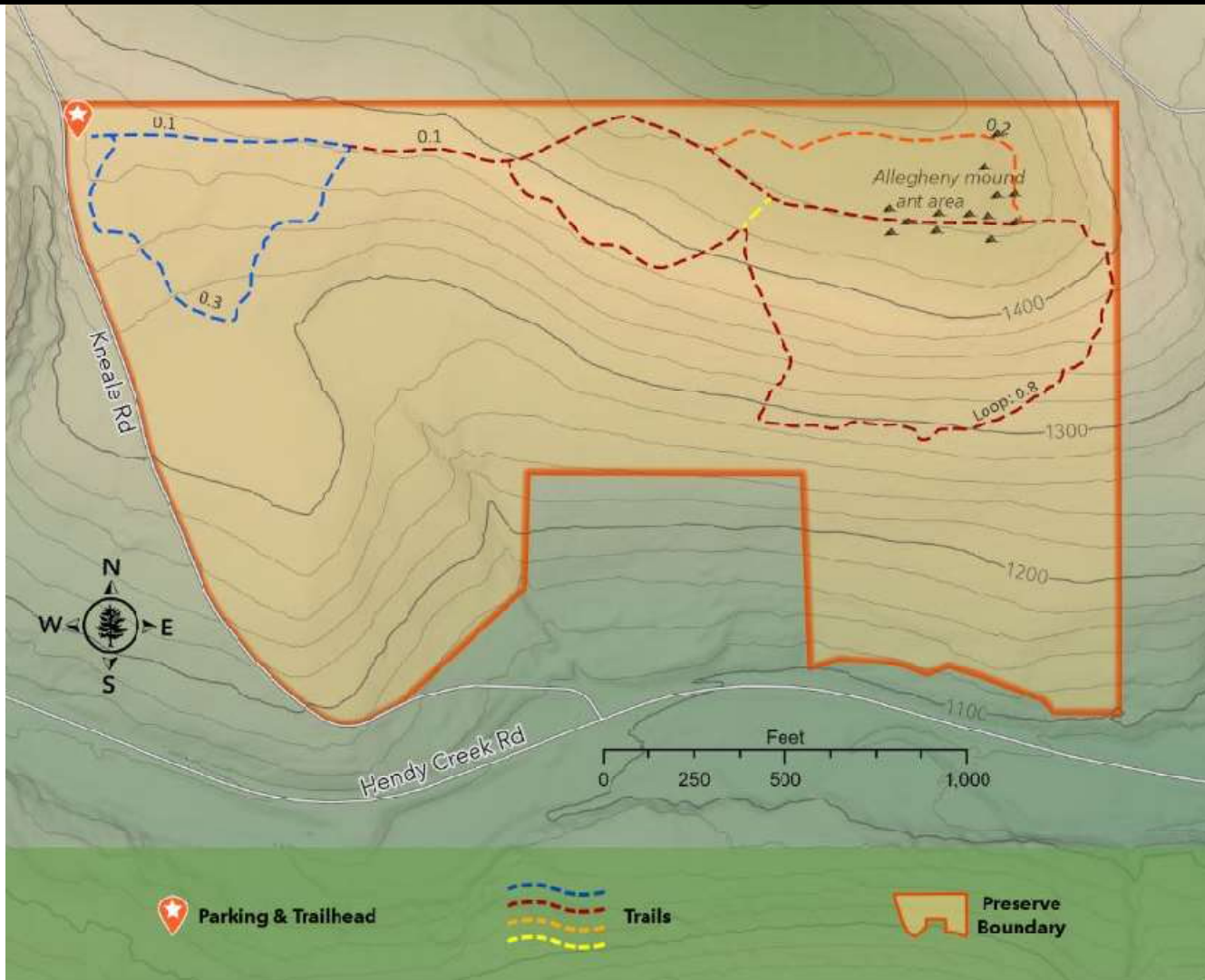



N


 NOT TO SCALE

Houghton Land Preserve Map
 Finger Lakes Land Trust
 Town of Corning
 STEUBEN COUNTY, NY


LaBella
 Powered by partnership.
 Corning to Elmira Trail Study
 PROJECT NO. 2233983



 Parking & Trailhead

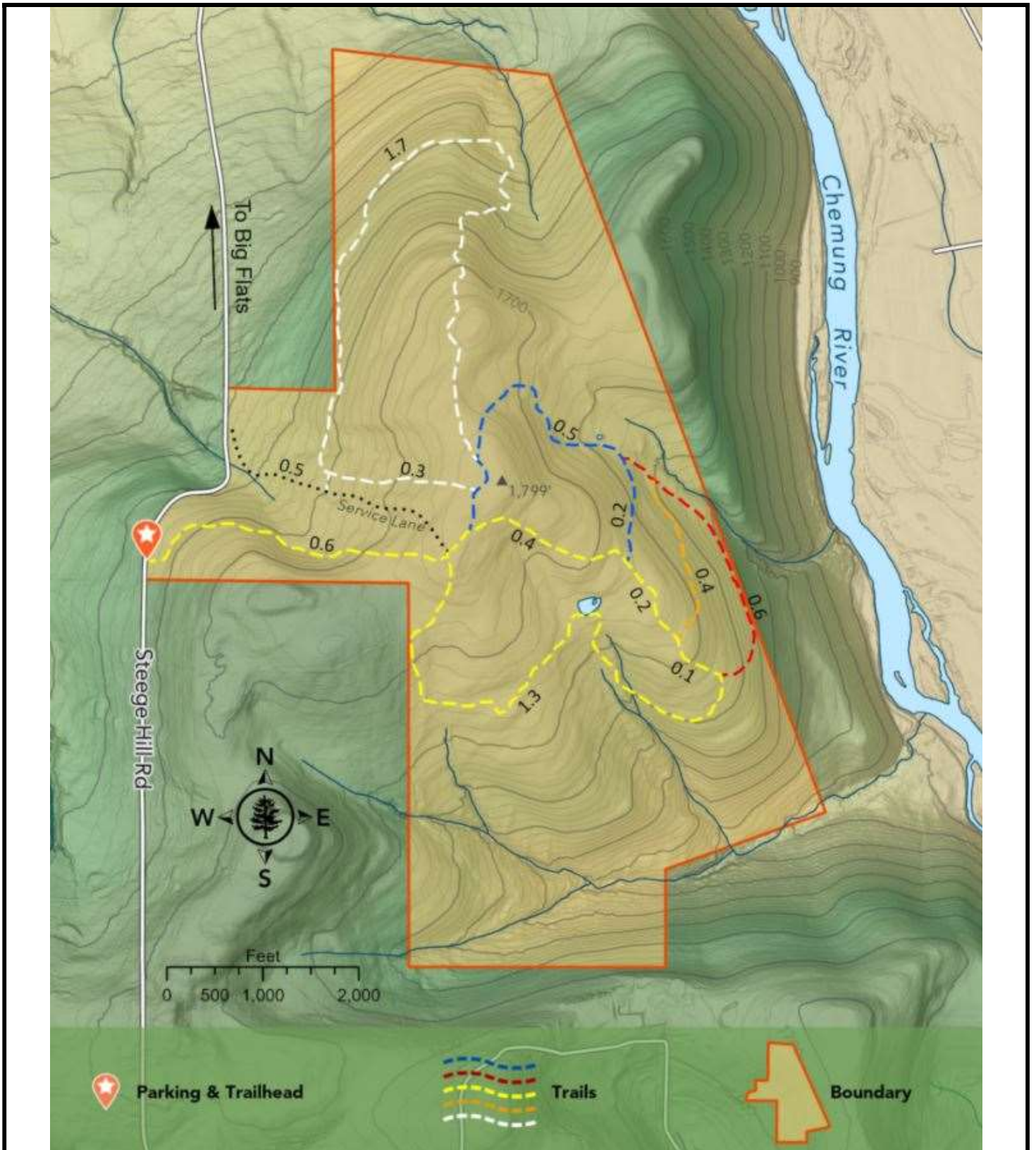
 Trails

 Preserve Boundary

N

 NOT TO SCALE

Plymouth Woods Nature Preserve Map
 Finger Lakes Land Trust
 Town of Big Flats
 CHEMUNG COUNTY, NY

 **LaBella**
 Powered by partnership.
 Corning to Elmira Trail Study
 PROJECT NO. 2233983



N

 NOT TO SCALE

Steege Hill Nature Preserve Map

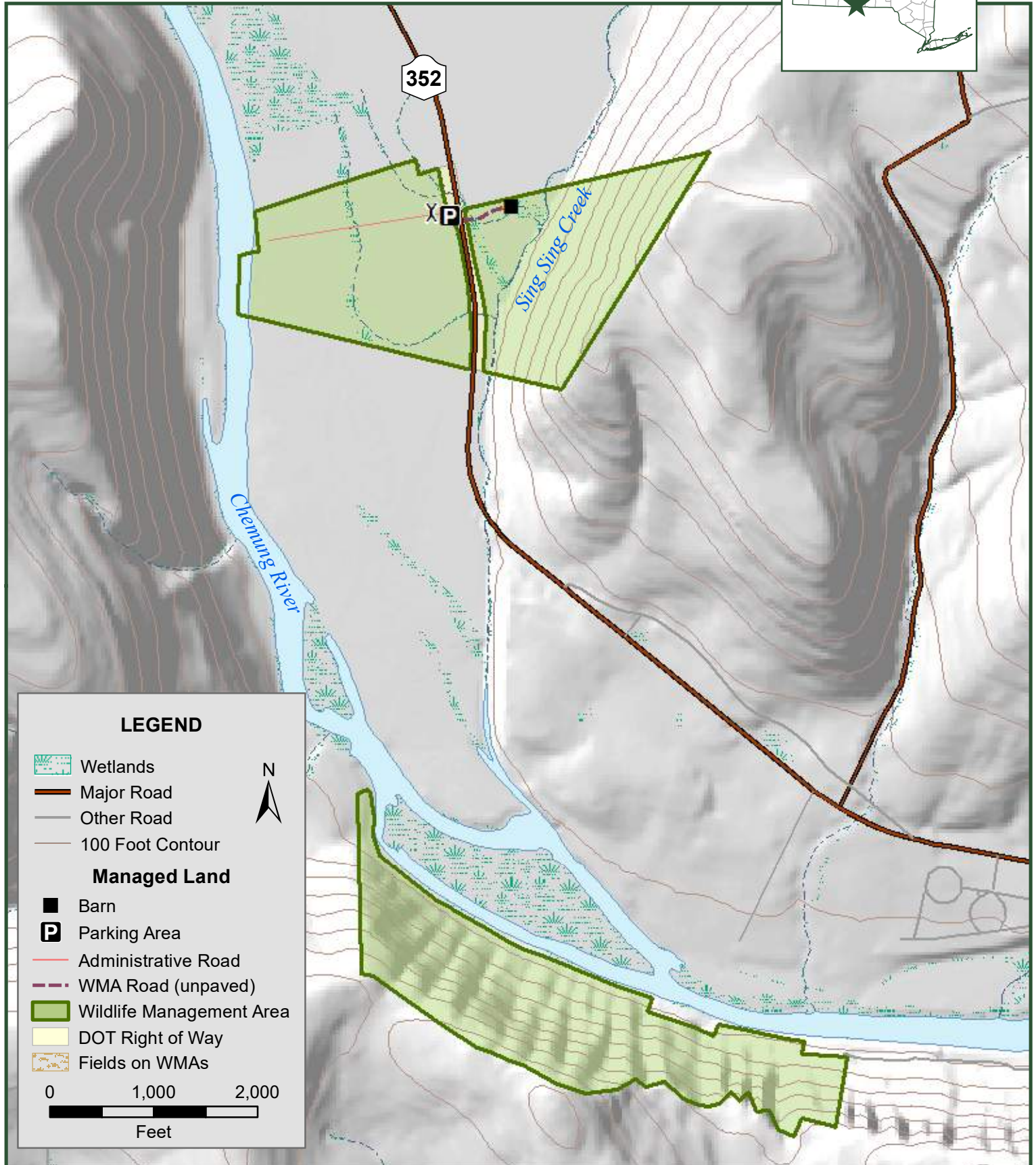
Finger Lakes Land Trust

Town of Big Flats
 CHEMUNG COUNTY, NY

LaBella
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 Corning to Elmira Trail Study
 PROJECT NO. 2233983

BIG FLATS

Wildlife Management Area



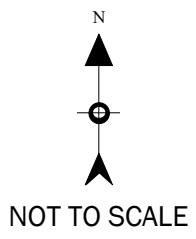
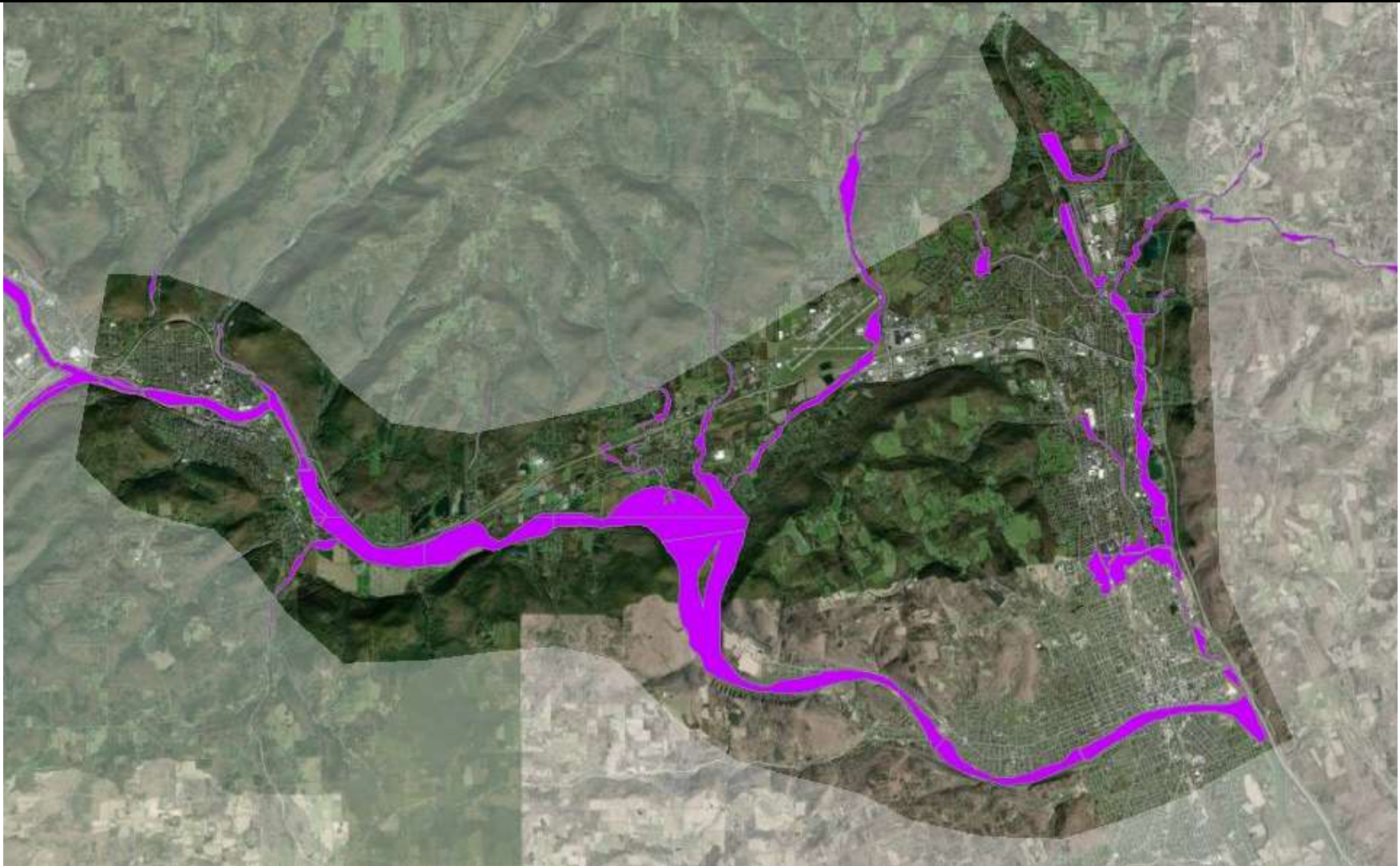
Department of
Environmental
Conservation

Big Flats, Chemung Co.



Table 3.2.6.1: Chemung River Tributaries

Tributary Name	Classification	County
Tioga River	C	Steuben
Cohocton River	C	Steuben
Cutler Creek	None Provided	Steuben
Post Creek	C	Steuben
Narrows Creek	C	Steuben
Gorton Creek	C	Steuben
Whisky Creek	C	Steuben
Winfield Creek	None Provided	Chemung
Sing Sing Creek	C	Chemung
Hendy Creek	C	Chemung
Hoffman Brook	C	Chemung
Newton Creek	C	Chemung
Varous unnamed tributaries	C	Steuben and Chemung

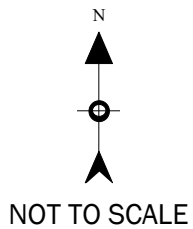


Chemung River FEMA Floodway Map
Finger Lakes Land Trust

STEBEN COUNTY, NY
CHEMUNG COUNTY, NY



Corning to Elmira Trail Study
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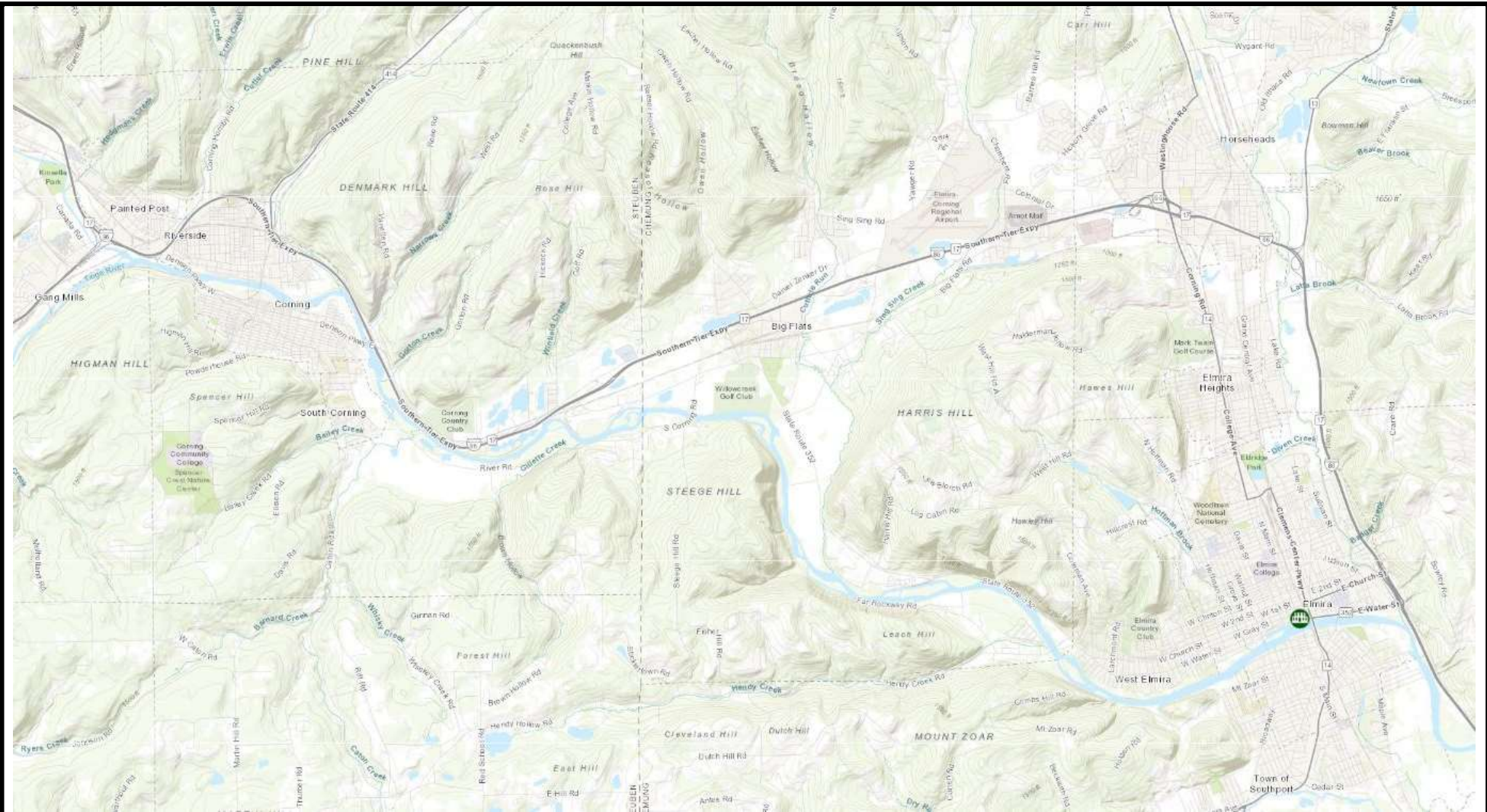


Chemung River Leveed Area Map
National Levee Database - GIS Mapped Data

STEBEN COUNTY, NY
CHEMUNG COUNTY, NY



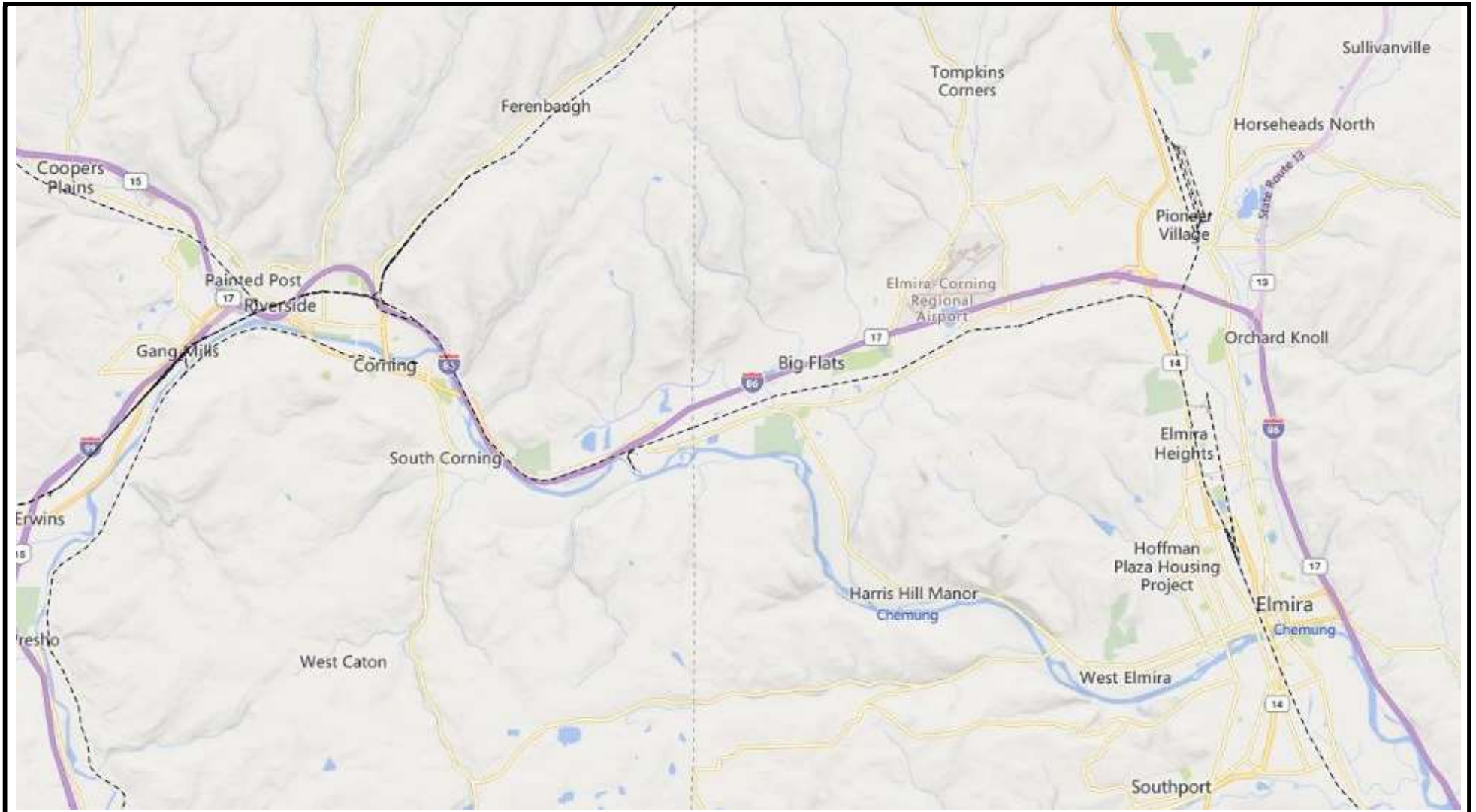
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 NOT TO SCALE

Topographic Map
 DEC Info Locator
 STEUBEN COUNTY, NY
 CHEMUNG COUNTY, NY

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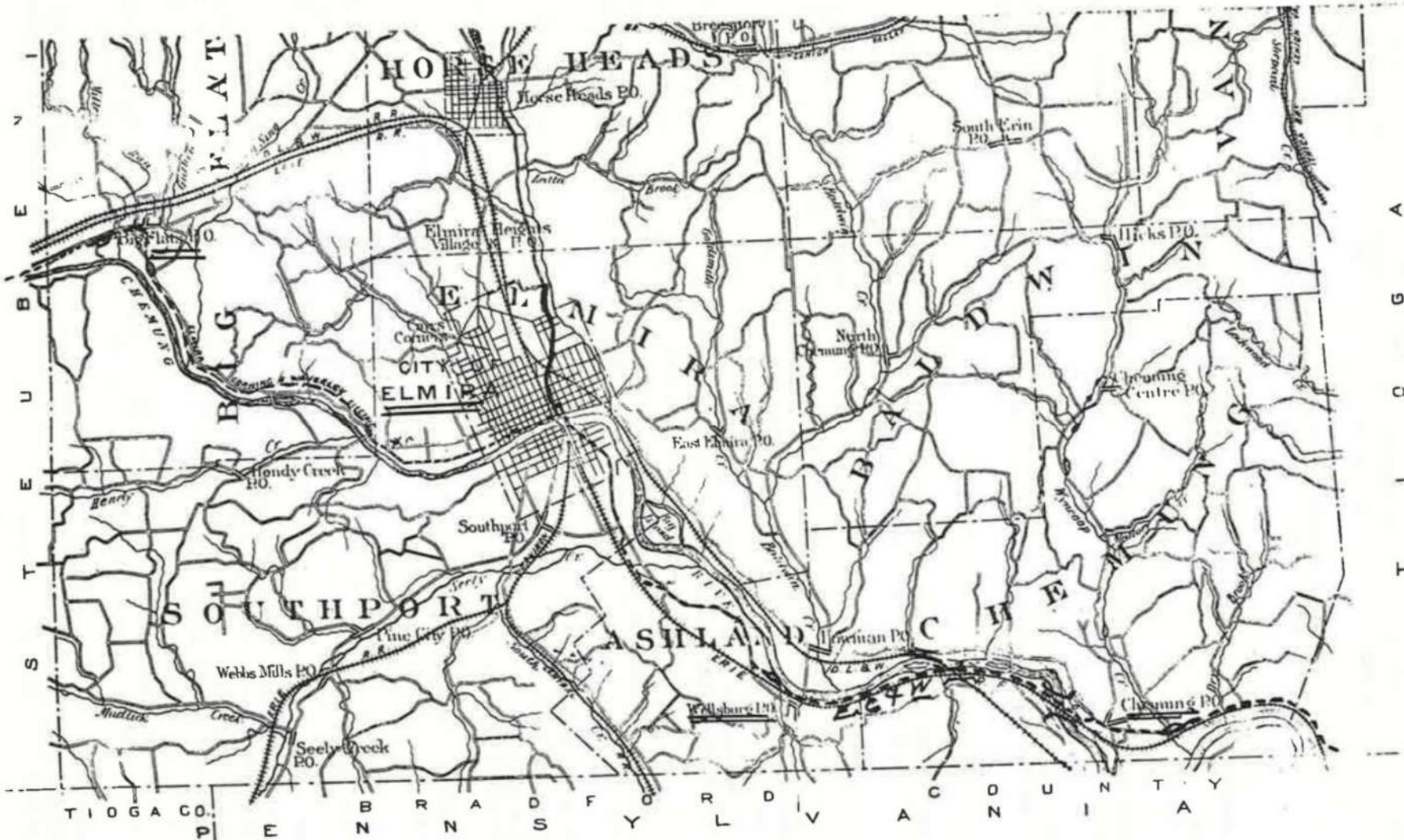
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Existing Rail Infrastructure Map
 U.S. Census Bureau - NGDA Data

STEBEN COUNTY, NY
 CHEMUNG COUNTY, NY



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E.C. & W. Ry. Historic Trolley Map
 "Elmira and Chemung Valley Trolleys in the Southern Tier"
 by William R. Gordon

CHEMUNG COUNTY, NY



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