

SUSTAINABLE ECONOMIC DEVELOPMENT PLAN

SALMON RIVER GREENWAY CORRIDOR COMMUNITY ENHANCEMENT AND DEVELOPMENT PLAN

SEPTEMBER 2003

Prepared by:
Dru Associates, Inc.
40 Hitching Post Lane
Glen Cove, New York 11542
(516) 676-7107



Contents

EXECUTIVE SUMMARY..... 5

I. BACKGROUND..... 9

 A. THE SALMON RIVER GREENWAY CORRIDOR 9

 B. GREENWAY CORRIDOR COMMUNITIES: PAST AND PRESENT..... 14

 C. EXISTING COMMERCE AND INDUSTRY 20

 D. THE HISTORY OF PLANNING IN THE GREENWAY CORRIDOR 25

 E. THE GREENWAY CORRIDOR AND THE RIVER’S NATURAL RESOURCES 38

 F. COMPARATIVE ANALYSIS OF OTHER GREENWAYS AND RIVER COMMUNITIES 41

II. ECONOMIC OPPORTUNITIES..... 52

 A. ENVIRONMENTAL TOURISM: CORRIDOR-WIDE OPPORTUNITY 54

 B. AGRITOURISM: AN OPPORTUNITY ADJUNCT TO ENVIRONMENTAL TOURISM 55

 C. ANTIQUES/COLLECTIBLES 58

 D. EXISTING AND EXPANDED PROMOTIONAL OPPORTUNITIES 59

 E. ENVIRONMENTAL EDUCATION..... 62

 F. EXPANSION OF THE SALMON RIVER GREENWAY CORRIDOR’S RECREATIONAL
 ACTIVITIES 68

 G. PRIVATE SECTOR NICHE DEVELOPMENT 71

III. SOURCES OF REVENUE 73

 A. SALMON RIVER FISHERY 73

 B. REAL PROPERTY MANAGEMENT 76

 C. FEDERAL AND STATE SOURCES..... 77

 D. NOT-FOR-PROFIT, PRIVATE AND CORPORATE SOURCES..... 79

IV. A DEVELOPMENT STRATEGY 83

V. RECOMMENDATIONS..... 85

A. MANAGING GROWTH THROUGH EXISTING REGULATIONS 86

B. A PROTECTION STRATEGY..... 89

C. ECONOMIC DEVELOPMENT MEASURES 92

D. SALMON RIVER GREENWAY COMMITTEE: FUTURE PROMOTIONAL INITIATIVES 93

VI. CONCLUSION 97

BIBLIOGRAPHY 98

APPENDIX I: OSPREYS (*PANDION HALINETUS*) 102

APPENDIX II: MYERS HILL DRUMLIN..... 102

APPENDIX III: THE SEAWAY TRAIL 103

APPENDIX IV: RECREATIONAL RESOURCES 105

APPENDIX V: ENVIRONMENTAL AND EDUCATIONAL CAMPS..... 112

APPENDIX VI: WILD, SCENIC AND RECREATIONAL RIVERS ACT 120

List of Tables and Figures

FIGURE 1. POPULATION TRENDS FOR MUNICIPALITIES IN THE SALMON RIVER GREENWAY
CORRIDOR, 1950-2000 12

TABLE 1. RESIDENT POPULATION IN THE SALMON RIVER GREENWAY CORRIDOR, 1950-2000 12

FIGURE 2. PERCENT POPULATION OF THE SALMON RIVER GREENWAY CORRIDOR, BY TOWN..... 13

FIGURE 3A. COLRAINE, MASSACHUSETTS: AN ABANDONED CHURCH 47

FIGURE 3B. COLRAINE, MASSACHUSETTS: THE SAME ABANDONED CHURCH CONVERTED TO A
GARDEN RESTAURANT..... 47

FIGURE 4A. EXTERIOR OF A FORMER CHURCH IN WILMINGTON, VT CONVERTED TO AN ART
GALLERY 48

FIGURE 4B. INTERIOR OF A FORMER CHURCH IN WILMINGTON, VT CONVERTED TO AN ART
GALLERY 48

TABLE 2: 1996 NUMBERS OF ANGLERS, ANGLER EFFORT AND EXPENDITURES ON THE SALMON
RIVER BY NEW YORK STATE MEDIA REGIONS*..... 73

TABLE 3. LAND USE REGULATION STATUS MARCH 2003, SALMON RIVER GREENWAY
CORRIDOR..... 88

EXECUTIVE SUMMARY

This study has been prepared for the Salmon River Greenway Corridor Community Enhancement Plan Steering Committee with funding provided by the New York Department of State Quality Communities Demonstration Program, at the request of the Oswego County Department of Planning and Community Development. This study provides accurate, current information on existing natural and commercial resources within the Salmon River Greenway Corridor (SRGC), and the six municipalities that comprise the SRGC. Opportunities for commercial growth have been explored that will enhance the sustained economic development along the Greenway Corridor, while protecting the non-renewable natural resources of the River.

The purpose of this sustainable economic development¹ plan is to provide direction to SRGC decision makers as they work to maintain the intricate balance between preserving and protecting the unique natural resources of the Greenway Corridor while maximizing year-round tourism and recreational development and economic and social growth in the SRGC.

The goals are to:

1. Provide diversified, year-round recreation in the Salmon River Greenway Corridor

¹A definition of “sustainable development” was first published by the International Union for the Conservation of Nature in 1980, and expressed by the World Commission on Environment and Development in 1987 as ‘development that meets the needs for the present without compromising the ability of future generations to meet their own needs.’ (Markandya, Harou, Bellu & Cistulli, 2002) Various researchers began adding to the framework for a definition, and in 1990 suggested that; “no future generation be worse off than a present generation.” Over the past 10 years, authors on the subject have shown how the planning for sustainable development must use the combined skill of environmental scientists, sociologists and economists, in order to ensure that planning for resource conservation is balanced to protect our biosphere’s reproductive capacity. For the SRGC, the resource that must be conserved to “sustain” economic development is the River’s water quality, which in turn involves conservation practices along the riverfront, and its tributaries. Without the ecology of the River, the SRGC cannot sustain the type of economy that can grow around the fishery and tourism. Even a Plan to maintain the “status-quo” will require conservation of the River, if the local economy is to sustain itself.

2. Promote a broad based economy focused on protecting and enhancing the Salmon River's resources
3. Enhance the quality of life for residents and future generations of the Greenway Corridor.

Economic growth and long-term fiscal stability for the towns and villages of the SRGC must be founded in the rural and small town character of the population and their traditional commercial interests. Many studies performed by, for, and in Oswego County SRGC communities in order to protect the County show that the majority of economic activity along the Salmon River is tied to the river. Clearly, it is incumbent that the broad coalition of individuals, agencies and interested parties involved to date in the planning of the SRGC recognize this focus as future economic planning occurs. Accordingly, this study sets as its background a review of the demographics of the SRGC communities, and then explores the existing commercial interests and land use inventories.

Implementing the recommendations and alternatives presented in this study requires a partnership and participation of everyone who benefits from, or whose actions and decisions impact upon the SRGC. Such cooperation implies a "buying" into a "shared vision" of the long-range goals and objectives of the resources and coordinated planning and implementation for appropriate land use and infrastructure development. However, each town and village represents its own unusual conditions and therefore some independence in local management is recommended. From this research it is evident that many initiatives for development are already in place but no consensus has been reached as to what this shared vision is. Furthermore, not all of these recommendations can be taken on at one time and need to be prioritized in order to be successful. While it is in the scope of this document to provide recommendations to assist the steering committee in making balanced and controlled decisions as to the

development of sectors in the SRGC, the fiscal analysis necessary to support prioritization is beyond the scope of work.

Organizations for promoting the SRGC are already in place in the form of:

1. The 454-mile New York State Seaway Trail (a not-for-profit program advertised on TV and in region publications, and available on the web at www.NYByways.com or www.seawaytrail.com)
2. Oswego County's Department of Promotion and Tourism publications (on the web at www.co.oswego.ny.us/tourism/)
3. The State of New York's I Love NY promotions (on the web at www.iloveny.com/main.asp and www.CNYSummer.com and www.CNYSummer.com)
4. Tughill Tomorrow's promotional and recreational site of the Tug Hill Region (on the web at www.VisitTugHill.com.)
5. Chamber of Commerce and Business Publications from organizations such as Tughill Tomorrow, Pulaski Eastern Shore Chamber of Commerce, Altmar-Albion Business Association and Cornell Cooperative Extension.

This research has focused not only on original research but also on a compilation of the vast amount of secondary data already available and research performed to date in the SRGC. Original research has focused on viable alternatives for sustainable economic development in the SRGC.

The Salmon River Greenway Committee is now seeking to guide the towns and villages of the SRGC in planning their own future. What are the choices? The attraction of heavy industry with large numbers of jobs is not realistic, and runs counter to protecting the river. The likelihood is small that the Greenway Corridor will become involved in any form of "suburban sprawl" or extensive residential development. So, the remaining choice is to enrich the tourist and destination opportunities, and to plan development with the river and other recreation foremost in the list of priorities. This Plan also recommends dovetailing environmental education with the area's recreational opportunities, taking advantage of the ecological and cultural identity of the River. An

important part of this study is to promote a rediscovery of the River and a better understanding of how it can contribute to the SRGC quality of life and the vitality of those towns located at its banks.

I. BACKGROUND

Economic growth and long-term stability for the towns and villages of the SRGC must be centered on its rural, small-town character, pristine resources and traditional commercial interests. To date most studies performed show that the majority of economic activity along the Salmon River is ultimately tied back to the river. It is incumbent on those responsible for the future of the Greenway Corridor to recognize that focus as future economic planning occurs. Let's first look at the demographics of the SRGC, and then explore the existing commercial interests and land use.

A. The Salmon River Greenway Corridor

The SRGC, located in its entirety in Oswego County, Upstate New York, runs through the Towns of Richland, Altmar, Orwell, Redfield, Albion and the Villages of Altmar and Pulaski. The geographic area of the SRGC has been defined as a two-mile wide greenway corridor located on the north and south side of the Salmon River and Upper Reservoir. The SRGC is a greenway as defined by the President's Commission on American Outdoors and is a "Corridor of private and public recreation lands and waters to provide people with access to open spaces close to where they live and link together the rural and urban spaces in the American landscape." The Salmon River Greenway, as with all greenways, "...establishes a linear system of parks and open spaces that connect major population areas along waterways in order to protect and enhance natural, cultural and historical resources." (Oswego County Comprehensive Plan). Furthermore, the Salmon River Greenway is a natural corridor for wildlife populations that facilitates movement between large protected open space areas.

The SRGC extends along the Salmon River, between Lake Ontario near NYS Route 3 in Port Ontario to the County line in the Town of Redfield. The Greenway Corridor encompasses the major transportation routes; NYS Routes 13 and County Route 2, and

can be accessed via NYS Route 3 and a large four-lane interstate highway (I-81). Secondary access is via NYS Route 11, which runs parallel to I-81.

The entire SRGC can be easily circumnavigated using minor arterial roads. On the north side of the Greenway Corridor, heading east from NYS Route 3, Lake Road, or County Route 5, connects to Pulaski. From Pulaski, County Route 2A connects to Centerville Road, which follows the river and meets up with County Route 52, Hogs Back Road, County Route 22, Falls Road, Dam Road and then with County Route 2, which leads to County Route 17 and 47 in Redfield. On the south side of the Greenway Corridor, heading east from NYS Route 3 is NYS Route 13 Scenic Byway, which runs along the river into the Village of Altmar where it meets County Route 22 and traverses along the Lower Reservoir. From there, County Route 30 heads south and leads to C.C. Road and then to County Route 17, which then meets up with County Route 27 just south of Redfield. The southern side of the Upper Reservoir does not have any roads running along the shoreline, and this is due to the fact that there are large areas of undisturbed wetland.

Demographics

The SRGC is comprised of six (6) municipalities: the four (4) Towns of Richland, Albion, Orwell and Redfield, and the two (2) Villages of Pulaski (Town of Richland) and Altmar (Town of Albion), as well as the Hamlet of Port Ontario. For the purposes of this study, municipal data were used in examining demographics. The combined 2000 population of these municipalities was 9,768.

Population Trends

Data from the U.S. census of 2000 showed an average 1.1% increase for the Corridor communities, or a 55.7% increase over the past 50 years. From data provided by the Oswego County Department of Planning and Community Development, the total population for the Greenway Corridor communities remained relatively static for the

years 1990-2000. Actual numbers show a total increase of 73 residents for the SRGC for these years (or .8%). These data are considerably lower than projections from the New York State Data Center, which predicted that the towns and villages of the SRGC would increase 10% in population from the years 1990-1995 and by 6% from 1995-2000.

The Village of Altmar has maintained a relatively constant resident population for the past 20 years (351 in 2000). The Towns of Albion (2%), Orwell (7%) and Redfield (8%) have experienced slight increases in resident population from 1990-2000. The Albion population (with the Village of Altmar) has increased from 2,043 residents in 1990 to 2,083 in 2000 (an increase of 40 residents in ten years), the Orwell population has increased from 1,171 residents in 1990 to 1,254 in 2000 (an increase of 83 residents) and the Redfield population has increased from 564 in 1990 to 607 in 2000 (an increase of 43 residents). The Village of Pulaski however experienced a decrease in total population from 2,525 in 1990 to 2,398 in 2000 (a decrease of 227 or a 5% loss of population). The Town of Redfield exhibits a small (-.5%) decrease from 1960 to 1970 (388 to 386) but thereafter increases through the 80's, 90's and year 2000. The Village of Pulaski presents another picture with the population more in a state of flux. Increases are evident from 1960 to 1970 (2,256-2,480) with a subsequent decrease to the 80's (2,480-2,415 or a decrease of -2.6%), an increase into the 90s (2,415-2,525) and a subsequent decrease into the year 2000 (2,525-2,398 or a 5% loss in population). Increases in total resident population are however evident for the Greenway Corridor for the years 1960-2000, but taper off from the 1990s. The Town of Richland has the highest 2000 population of all the corridor communities at 3,426, followed by the Village of Pulaski at 2,398, the Town of Albion at 1,732 and the Town of Orwell at 1,254. It should also be noted that the Villages have the greatest population density in the Greenway Corridor (599 persons per square mile in Pulaski and 175 persons per square mile in Altmar) with Redfield having the smallest (8 persons per square mile). Generally, the population of the SRGC communities decreases as you head upriver.

Population density for 2000 for the entire Greenway Corridor is 42 people per square mile, which is sparse in contrast to Oswego County’s overall population density of 126 people per square mile.

These numbers are reflected in Figures 1 and 2/Table 1.

Figure 1. Population Trends for Municipalities in the Salmon River Greenway Corridor, 1950-2000

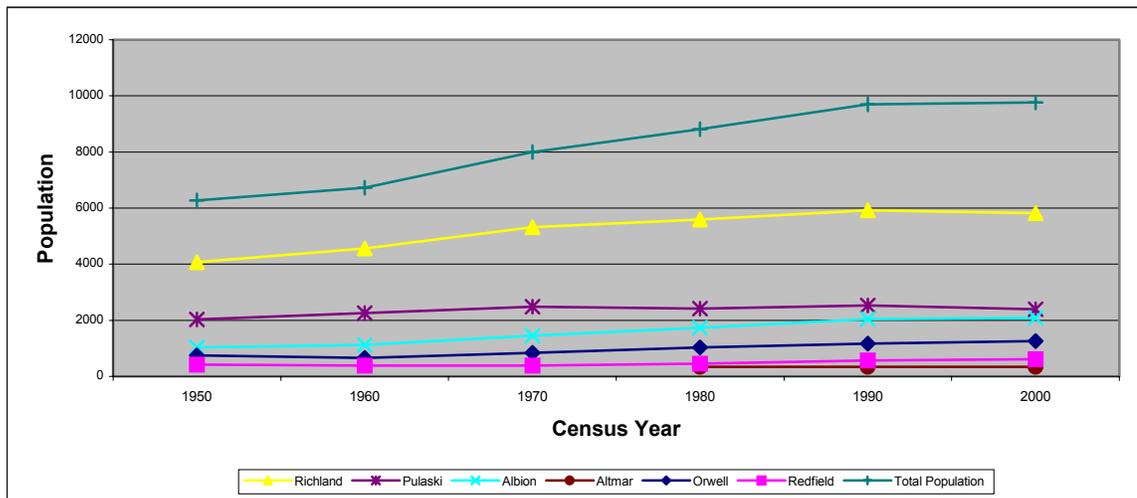
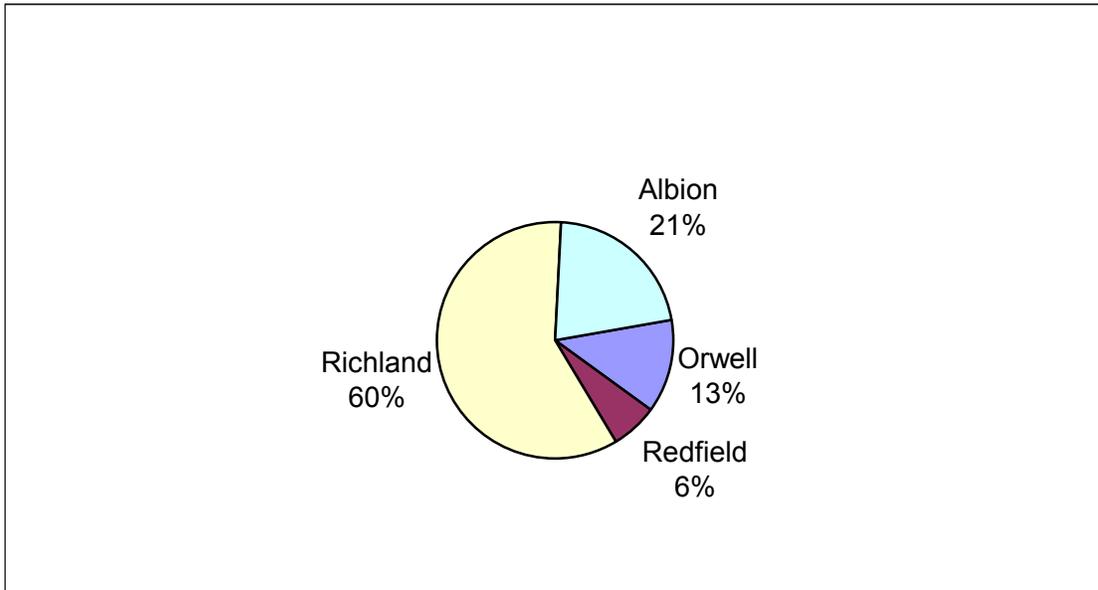


Table 1. Resident Population in the Salmon River Greenway Corridor, 1950-2000

	<i>Orwell</i>	<i>Redfield</i>	<i>Richland*</i>	<i>Pulaski</i>	<i>Albion*</i>	<i>Altmar</i>	<i>Total Population</i>	<i>Increase in total population per decade</i>
1950	752	418	4067	2033	1036		6273	
1960	663	388	4554	2256	1125		6730	457
1970	836	386	5324	2480	1452		7998	1268
1980	1031	459	5594	2415	1730	335	8814	816
1990	1171	564	5917	2525	2043	335	9695	881
2000	1254	607	5824	2398	2083	335	9768	73

- Village totals included in Town population numbers

Figure 2. Percent Population of the Salmon River Greenway Corridor, by Town



Population Structure

Age data from 2000 (Oswego County Department of Planning and Community Development) show a relatively stable resident population during the pre-school and school years with a sharp decline thereafter. Reasons for this exodus are merely speculative and could include leaving for tertiary education, work opportunities or the military. It is evident, however, that the size of the age classes of the resident population increases from the mid twenties and peaks for the age class including the mid to late forties (i.e., the child-bearing and child-rearing years), thereafter decreasing consistently until the age class that includes residents in their late sixties. An increase in the age class in the late sixties is evident in the resident population in the SRGC, possibly signaling a return to the Greenway Corridor. This increase in resident population is maintained through the early seventies. Decrease in age of the resident

population is evident thereafter, and reasons for this can only be speculative and would center on the many issues of aging.

Trends in age data suggest that the Greenway Corridor is a place to raise children, with high school and college graduates emigrating from the Greenway Corridor and subsequently returning to raise their own children.

Housing Trends

Housing trends show none (Altmar, Pulaski) to small increases in housing starts from the period 1990-2000 for the Towns of Albion, Orwell, Redfield and Richland, with the Town of Richland showing the most housing development. Demographics in terms of total resident population and housing remain relatively stable for the SRGC, and suggest that not much change has occurred over the past ten years. Furthermore, demographic and housing data support the fact that there had been little physical growth in the Greenway Corridor in the last 10 years. Regardless of the “sluggish” population growth in the last decade, active management of infrastructure, service needs and employment opportunities is imperative in preserving the unique natural resources of the Greenway Corridor, and off-setting impacts associated with increased visitor contact.

B. Greenway Corridor Communities: Past and Present

The Town of Richland: The Town of Richland is situated in the lee of Lake Ontario in the northern part of Oswego County, and boasts varied vistas, dominated by dense, continuous forests. Richland has supported a lumber industry, which has given way to agriculture followed by dairy farming and now fishing.

Fishing, as well as hunting, were pursued by Native Americans en-route to the Mohawk Valley and Indian artifacts have been found in Richland. The NYS Route 13

“trail” of the 1600’s and 1700’s became a “critical traveled way” during the Revolutionary and Colonial periods. New York State’s Byways Program recognizes it as the “Revolutionary Trail.” Also located in Richland are the remains of the old railroad depot. The hamlet of Richland, formerly a refuel depot for the Syracuse/Watertown lines, was previously a transportation hub.

Two of the largest and longest established employers in the SRGC are located within the boundaries of the Town of Richland. These include the industrial manufacturing companies, Schoeller Technical Papers, a manufacturer of high quality photographic and specialty papers and the Fulton Companies manufactures of industrial boilers and industrial thermal heating units.

The Village of Pulaski: Included in the Town of Richland’s municipal boundaries is the Village of Pulaski, the largest of all the municipalities in the Greenway Corridor. Pulaski, named after General Pulaski, a hero of the American Revolution was first settled in 1804 and incorporated on April 26th, 1832. Because of Pulaski’s location on the Salmon River, and as a result of the associated abundance of waterpower, many mills were established. One such location is the former site of the Ontario Iron Works, one of the first foundries. This company was co-built by Benjamin Snow, Sr. The Snow legacy continues in the form of the John Benjamin Snow Foundation, a philanthropic foundation established by multi-millionaire grandson, John Ben Snow. This foundation provides support for a wide range of educational, scientific, religious and community projects in Pulaski.

In 1963, the Snows donated their Maple Avenue family home to the Village of Pulaski for use as a public library. With the re-establishment of the library at the Snow Memorial Building, the Pulaski Historical Society was established in order to preserve the history of the village. Historical walking/riding tours are available through the Society and include the Jefferson Street, Pulaski Village Historic District, which was the subject of a destructive fire in 1881 and was subsequently rebuilt in 1882. Today,

because of their unique and detailed architecture, many of these buildings are listed on the National Register of Historic Places. A walking tour brochure is available through the Heritage Foundation to assist visitors in identifying historic buildings. One such building is the H. Douglas Barclay Courthouse, renamed after Senator Barclay, an eighth generation resident. The Courthouse, one of Oswego County's seats, still conducts County court.

Another important historic building is the former movie theatre, currently an auto parts store, located on the south end of Jefferson Street. This remodeled building is in a state of disrepair and the altered building façade creates a detrimental visual impact to the historic character of downtown. The building is one of the first buildings seen upon entering the historic district.

Also located in Pulaski are the remains of the Syracuse Northern Railroad arches. These arches were constructed so that a railroad crossing steel bridge would not block the wagon trail running alongside the river. The remains of these arches are at the Black Hole River fishing access. The foundation of the Charmaphone Company mill is also found at this access.

The Salmon River Fine Arts Center situated on Jefferson Street, hosts, promotes, coordinates and sponsors numerous cultural arts programs and art shows as well as an art competition. Art courses are available to adults and children.

A Farmer's Market is also operational on Fridays 4–8 pm, June through August, where local farmers are invited to bring in and market their produce. The Market is located in Pulaski's South Park on Jefferson Street. The Salmon River Festival, held in September in South and North Park features a day of family entertainment. The Village of Pulaski, because of the fall salmon run and year round fishing is referred to as "The Salmon Capital of the World." Along the fast moving river are several deep, slow moving waters, which support abundant fish and have become favorite fishing spots.

These “fishing holes” are the Black Hole Long Bridge, Short Bridge, Town Pool, I-81 Pool, Staircase Pool and the Dunbar Field/Ballfield Pool.

While the Salmon River winds through downtown Pulaski, vacant space between riverbanks and commercial buildings is used predominantly for parking and adequate linkages between the commercial district and recreation have not been fully established.

The Hamlet of Port Ontario: Port Ontario, also located within the municipal boundaries of Richland, is the result of an early attempt to establish a port at the mouth of the Salmon River. In 1838, the Selkirk Shores lighthouse was built. The lighthouse stands today and is listed on the National Register of Historic Places, and is one of the eight lighthouses featured in the Seaway Trail Lighthouse tour, a ‘moving tour’ along the Seaway Trail freshwater shoreline. This tour presently functions through the Elderhostel program. Selkirk Shores State Park, a 980-acre park located five miles west of Pulaski, features 148 campsites, 26 cabins and includes a sandy beach, hiking trails and day-use picnic areas which are in operation during summer months. During July 2002, the first Sandy Island Beach Selkirk Shores State Park Triathlon took place. Winter recreation centers on the park’s cross-country trails and snowmobilers are able to connect to the Tug Hill snowmobile trail system from the Park.

The Town of Albion: The Town of Albion became its own township by separating from the Town of Richland in 1825. In terms of ecological and hydrological resources, the township has an abundance of wetlands, both north and south of the Salmon River. There are also a great number of eskers in this area, which are geological formations created by the last glaciation. Eskers are long sinuous ridges of water-deposited sediment. There are several tributaries located north of the river. The region known as the Tug Hill Plateau ultimately feeds these tributaries. The Tug Hill Plateau is the westernmost extension of the Great Northern Forest, which stretches from Maine to New York. It includes intact spruce and northern hardwood forests, extensive wetlands, and pristine streams and rivers. This connection between the Tug Hill Plateau and the

Salmon River gives the river an even greater ecological significance in the region, the state and the northeast.

The Pulaski/Eastern Shores Chamber of Commerce and Visitors Center, open year round, is housed 3 miles east of Pulaski in the Town of Albion, on NYS Route 13, and provides tourist information to interested visitors. A co-located structure also houses the International Sportfishing Museum, which showcases some items from the Gladding Corporations closed museum. An expansion project is presently underway in order to display the rest of this historic collection. CCE of Oswego County's Small Business Program and numerous community volunteers are assisting the Chamber with this expansion.

The Village of Altmar: The Village of Altmar, originally called Sand Bank, was first settled in 1812, incorporated into a village in 1876, and is located within the north central part of the Town of Albion. Several grist and sawmills were started in Altmar with Salmon River waterpower. The early economic impetus in Altmar involved the production of tannic acid, used for tanning hides. Tannic acid was produced from the area's abundant hemlock trees and resulted in the establishment of tanneries along Salmon River. The depletion of hemlocks later resulted in the demise of the tanneries in the 20th Century.

Included in the history of Altmar are numerous disastrous fires. The fire in 1885 destroyed almost the entire business district, leaving only two churches standing and the fire in 1894 caused considerable damage. Altmar is presently home to four churches. The First Congregational Church is the first standing church to be built in the village (1840). This was followed by the construction of St. John's Episcopal Church (1885), the Albion Riverside United Methodist Church (1895) and St. Mary's (1902). These churches provide excellent examples of the architecture of their times. A former post office is also found in Altmar.

Altmar's location on the Rome and Watertown Railroad accounts for its growth in the 1870-1890s and many of the Altmar residents were able to work on this railroad.

Located on County Route 22, the New York State Department of Environmental Conservation Salmon River Fish Hatchery's stocking program has resulted in the resurgence of the Salmonoid (which include Atlantic, King and Coho Salmon and Steelhead and Brown Trout). Self-guided public tours are available at the hatchery from March through November. The hatchery hosts an Open House on National Hunting and Fishing Day (the 3rd Saturday in September) co-sponsored for the past eight years by Cornell Cooperative Extension and assisted by 4-H, SAREP and Small Business Programs. The Open House, a family oriented day, features the Salmon River and its recreational opportunities as well as a petting zoo. Altmar is a center for the river's fishing tourism and the Altmar/Albion Business Association hosts the annual Salmon Anglers River fishing derby.

The Town of Orwell: First settled in 1806, John Reynolds, the first town supervisor, named the Town of Orwell in 1817 after Orwell, Vermont. The Town of Orwell is situated in the north central part of Oswego County. Orwell has areas of escarpment ranging from 300-1,000 feet above Lake Ontario and hosts the Salmon River Falls. The 110-foot falls are considered to be among one of the great natural wonders of New York State and are nearly as high as Niagara Falls.

Orwell's industry has centered on logging, and in earlier days logs were floated down the Salmon River.

Located in Orwell are the Lower Reservoir and the Reliant Lighthouse Hill Hydropower Facility. The 151-acre Lower Reservoir is situated behind the Lighthouse Hill Dam and supports many species of fish. The 1930's Lighthouse Hill Facility was built to generate power during peak demand times. The operation of the facility caused extreme daily and hourly water fluctuations. Reliant, in cooperation with the New York State Department of Environmental Conservation and required by FERC licensing, has

subsequently altered their methods of operation and now releases minimal amounts of water at staggered times resulting in an improvement in downstream fishing.

An osprey (*Pandion haliaetus*) nest has been observed atop a power pole next to the reservoir. (Appendix I). Ospreys are currently protected under the Migratory Bird Treaty Act. Because this site is not included by the NYSDEC in its mapped breeding range this osprey nest may have some significance on the State level.

The SRGC also contains a number of striking and rare geological features, such as the Myers Hill drumlin. (Appendix II)

The Town of Redfield: The first town to be settled on the Salmon River and the largest in area was incorporated in 1798 and named after Dr. Frederick Redfield, a large property owner in the area. Redfield is located in the farthest northeast corner of the county receiving up to 300” of lake effect snow and is in close reach of the Tug Hill Snowmobile trail network making it an excellent destination for snowmobilers. Cross-country skiers have likewise found Redfield an excellent place to visit, and Salmon Hills Resort, a private recreational resort located just outside the small hamlet of Redfield, offers groomed trails to cross-country skiers

Redfield’s boundary includes the Salmon River Upper Reservoir. A large percentage of the town remains forested. Resident population is extremely sparse and industry, which is minimal, primarily involves lumbering. To many, the most outstanding feature is Redfield’s relatively undeveloped state and beautiful scenery.

C. Existing Commerce and Industry

Information taken from Standard Industrial Classifications (1994-1997) and from the North American Industrial Classification System (1998-1999) of existing business in the SRGC (Oswego County Department of Planning & Community Development) shows that the majority of businesses are retail establishments. During 1994-1997,

43% of these businesses dealt with retail trade and 29% of these businesses were in the service industry. Using the Standard Industrial Classification system, those businesses dealing with eating and drinking establishments were considered to be part of the retail system and accounted for 38.5% of retail business. Separating those businesses out from the retail system, some 16.1% of businesses in the Greenway Corridor were either eating or drinking establishments, or 26.9% were pure retail. Construction related businesses comprised 9%, manufacturing 4%, transportation and public utilities 5%, wholesale trade 3% and 1% of the business in the Greenway Corridor was either involved in agricultural services, forestry and fishing.

Methods of classification for characterizing the nature of employment were however changed during 1998-1999. Using the North American Industrial Classification system, those businesses dealing with restaurant or drinking establishments were included as part of the service industry. In 1998-1999, 14.1% of the businesses in the Greenway Corridor were eating and drinking services, and 25.5 % in the retail industry. Numbers of construction related activities remains almost constant, as do those businesses involved in real estate development.

During the years 1994-1998, 85%-86% of all classified labor force activities in the SRGC were concentrated in Pulaski (170 of 196 classified businesses). From 1999 data, 169 of the 195 classified businesses were in Pulaski. While growth remains relatively static, changes in the provision of services is evident.

In the study, "Commercial Services and Public-Professional-Financial Services Scales in Economic Development," Eberts and Ververs, (2000) found that the provision of a variety of private and public services was key in rural New York, with about 80% of the work force in these communities involved in the delivery of these services to their own and other communities. Patterns in community services in Oswego County were collected using a windshield survey technique (inherent in this method is an acceptable 5% level of error), translated into results presented using a Guttman scale.

From this study Pulaski was shown to have a total of 200 services. Pulaski was top of the scaled communities, exhibiting a correlation between communities with the largest number of services and those with the largest populations. Hence, the larger communities tend to be closer to the top of the scale. Using these data, services absent in Pulaski include a jeweler, clock/ watch repair, mobile home sales and quarry/gravel/top-soil sales, although the position of these absent services on the Guttman scale suggests that their success in future would be questionable. However on examining data provided by CCE, Ted's Gift and Jewelry and Firepoint Custom Jewelry Studio, a jewelry store and jewelry and repair service were respectively found to be located in Pulaski since 1989 and 1994.

From data presented in the Eberts and Ververs study, in the year 2000, the most common service in these communities was auto repair or body shop. Auto repair/body shop is a predicted service in Orwell, Redfield and Port Ontario and represents a potential business opportunity in these communities. In 1987 and 1993, restaurants were the most common service found in Oswego's rural communities but this category was ranked 2nd in 2000. However, data from 2000 separates restaurant and fast food/diner establishments, something not done in 1993, and a bias that could alter statistical results in the Guttman model.

In examining Altmar/Albion Town, a beauty parlor establishment is absent from the area, despite the prediction by the Guttman model that such a commercial use would be successful. Other absences are noted, but establishment of these ventures is considered to be risky. The services absent in Altmar/Albion Town (and Redfield) include: Auto Parts Store, Insurance Office, Building Materials, Lumber, Logs, Sawmill Services, Flower Shop, Ice Cream Stand, Grocery Store, Pizza Parlor, Bank, Diner, Fast Food Restaurant, Antique Store, Gift Shop, Funeral Service, Gas Service Station, Law Office, Video Rental, Medical Doctors Office, Liquor Store, Real Estate Office, Laundromat, Pharmacy, 5 & 10, Knick-Knacks, dollar store, etc., dental office, car wash, bakery, accounting, book keeping firm. Noteworthy commercial uses that are absent from

Redfield include an auto repair, body shop and a beauty parlor. Orwell exhibits the same commercial absences as listed above, with the exception of having a beauty parlor, a service that the Guttman model would not have predicted in this particular community. These findings are supported by zip code data and data provided by circuit riders in the SRGC.

Richland contains a range of commercial services that the Guttman model would not have predicted for this area, including a video rental store (1991), used car dealer (1987) and a beauty shop (1969). While success of these non-predictive commercial uses is extremely risky, and the scale score “prediction” would caution sustainable success, these services have been in existence for many years and fill a niche in their communities.

From data obtained from the OCCP (1997), it is evident that fishery services and associated accommodation, food, and equipment supply are the largest single pursuits in the SRGC and clearly much of the commerce in this area is dependent on the river. The people of the SRGC are different in their economic profile than the rest of Oswego County. By the 1990 only a small percentage of employment involved forestry, fisheries and agriculture throughout the County. In the SRGC fishery services and associated accommodation, food and equipment supply are the largest single pursuits. “The current service-centered (recreation, tourism, marina, etc.) emphasis now rivals the commercial trade, transportation, and resource product emphasis (manufacturing, commercial fishing, and seafood processing) that dominated coastal business activities for most of the eighteenth, nineteenth, and twentieth centuries. As more of the New York State population has moved towards the coast, the service industry has developed to ... respond to the desires of residents and visitors alike for access to coastal attractions.” (NY Sea Grant’s Strategic Plan, 2000-2005). Presently, more than 80% of business expansion in coastal areas is in the service economy. Service businesses are regarded as critical to a healthy NY economy (Strategic Plan, 2000-2005). These businesses are dominated by small business operating at low profit markets operating in

highly competitive environments with little impetus to band together to promote common goods or assist each other in problem solving. Efforts to support increased service industry contributions must come from outside the industry itself (NY Sea Grant, 2000-2005).

From circuit rider data, and the publication “Fishing and Hunting in New York” (Oswego Co. Dept Promotion & Tourism) it is evident that there are over 50 Charter Services and fishing guide services, 13 Hunting guide services, 7 taxidermists and numerous outdoor sports shops, tackle shops, smoke-houses and fishing license outlets in the SRGC.

At present, the largest employers in the Greenway Corridor are Schoeller Technical Papers and the Fulton Companies. Other large employers in the Greenway Corridor include Ponderosa employing 55 people and P&C supermarkets (a division of Penn Traffic) employing 48 people. McDonalds (79) as well as Northern Oswego County Health Services (59) are other large employers in the Greenway Corridor. Ames Department Stores (67) closed in October 2002, leaving a vacant store space. These companies are all situated in Pulaski.

Total unemployment rate in the corridor is 10%, and average median family income decreases in the towns as you travel upstream (Oswego. Co).

D. The History of Planning in the Greenway Corridor

In order to plan for the future, it is necessary to understand the historical development of the Salmon River and the Greenway Corridor. For the past 90 years, the Salmon River has been used to generate electricity, which began with the purchase of considerable lands around the Salmon River. The aim was to turn the Salmon River into a giant electrical producing system and the Salmon River Reservoir was created in order to provide hydropower facilities downstream with an adequate controlled water source. Power facilities were built and plants were leased and operated from the Salmon River Company by Niagara, Lockport and the Ontario Power Companies who merged and established the Niagara Mohawk Power Corporation in 1950. This acquisition of land, extending from the Village of Pulaski to beyond Redfield, resulted in the ownership of more than 7,000 acres of mostly undeveloped land forming nearly an unbroken Greenway Corridor of more than 53 linear miles of river and reservoir frontage.

Until the development of the Salmon River Fish Hatchery, a New York State Department of Environmental Conservation-funded project, Niagara Mohawk's generation of electricity, continued to be the Salmon River's dominant use. In 1988, realizing that they had a stewardship role, the Niagara Mohawk Power Corporation began the development of a comprehensive land use management plan for the Salmon River and completed a Comprehensive Land Management Program for the Salmon River Properties in 1992. This program recognized that the management of the Salmon River Lands should be an evolving, dynamic process, subject to refinement and modification. "Communication, co-operation, and informal decision-making among all river stake-holders will be required to achieve common objectives, and completed projects must be evaluated to determine whether planned objectives have been successfully met. The success of the 'Comprehensive Program is ultimately dependent

upon the program remaining flexible, with both Niagara Mohawk and the local community working together to respond to the evolving needs and opportunities found in the Salmon River region.” Included in this document were concerns regarding a lack of recreational diversity, limited recreational/economic season and male dominated day-use of the river. Environmental degradation, poor social, environmental and angling ethics and a lack of appropriate fishing-related infrastructure as well as quality services were also expressed concerns.

In keeping with the goals of their Land Management Plan, Niagara Mohawk, in cooperation with the New York State Department of Environmental Conservation thereafter began divesting itself of some of its land holdings. So began the impetus for developing and enhancing the greenway along the Salmon River Corridor and with guidance from the Conservation Fund and the Mellon Foundation, parts of the Greenway Corridor were either sold in fee or granted as easements to the DEC. These included:

- Sale to NYSDEC of 1,640 acres of land south of the Salmon River Reservoir
- Sale to NYSDEC of 112.5 acres surrounding and including the Salmon River Falls
- Conveyance to NYSDEC of ownership of 8 acres of angler parking along the river and right-of-way accesses to link parking with the Salmon River shore
- Conveyance to NYSDEC of approximately 14 miles of permanent Public Fishing Rights along the Salmon River
- Conveyance to NYSDEC of a conservation easement on 1,059 acres including a 200-foot conservation and fishing easement along the banks of the Salmon River and conservation easements on Burdick and Hucklebury Islands.

In addition, Niagara Mohawk, leased Forest Glen Linear Park to the Village of Pulaski, and as a result of these conservation easements public access was granted to the river, reservoirs and wetlands. At this time, Niagara Mohawk undertook the following initiatives many of which were the partial framework for the establishment of a greenway corridor:

- Cooperated with NYSDEC to create a scenic overlook park and recreation area at the Salmon River Falls
- Developed the concept of a hiking trail system from Pulaski to Redfield along the river and reservoir
- Conducted a feasibility study for the Salmon River Trail Visitor/Convention Center for education and commercial activities
- Redesigned the hydropower facilities and operational programs in order to maintain minimum in-stream flows for river ecosystem restoration, sport fishing and other recreational uses
- Explored the feasibility of other recreational facilities, services, or access as outlined in their Comprehensive Management Plan.

Concomitant with the development of the comprehensive management plan, Seaway Trail Inc., (Appendix III) in their development of the 454-mile Seaway Trail, commissioned the Oswego-Eastern Shore Communities (OESC) Tourism Development Plan (1990) in order to stimulate the development of areas they believed to be highly visible tourism elements of the trail. The SRGC was considered one of these primary destination areas. Consistent with the Seaways Trails goals of creating marketing themes, the primary themes of Coastal Recreation and Natural Resources were established for this region.

As a result of this study, specific recommendations were listed that were believed to represent the minimum development needed for the years 1990-1995 in order to expand the SRGC as a primary destination area. SRGC and the Tug Hill region were given top priority because they complemented and provided linkages with the adjoining regions of the Seaway Trail. The recommendations for the SRGC are listed as follows and the agencies and time frame during which implementation should have taken place is noted:

- Conduct a general site design and feasibility study for the Great Lakes Fishery Interpretive Center and Sportfishing Hall of Fame to be located on the Salmon River in the Village of Pulaski or Port Ontario (Seaway Trail, 1991-95).

- Encourage the Niagara Mohawk Power Corporation to publicly release the recreational facility development plans from their “Salmon River Greenway Corridor Study” (NiMo, 1991-92)

- Plan and locate a Salmon River Trail from the Seaway Trail to the DEC Fish Hatchery at Altmar (Seaway Trail, 1993-95)

- Support and encourage NYS OPRHP to complete the master planning process for Selkirk Shores State Park and to begin the physical redevelopment of the park. (NYS OPRHP, 1991-94).

- Support and encourage NYS DEC to complete the Salmon River fishery management planning and facility development process with Niagara Mohawk, the Pulaski-Eastern Shore Chamber of Commerce, and the local governments (NYS DEC, 1991-92).

- Encourage additional planned recreational cottage developments and small lodging businesses that can accommodate a variety of target markets. (Private Sector, 1993-95).

- Promote the Salmon River Trail as an entranceway to the Seaway Trail and OESC region. (Seaway Trail, 1991-95)

- Promote the SRGC and Mexico Bay Area as a primary tourism destination via the themes of sportfishing, coastal recreation, and natural resources with the strategy of

creating a more comprehensive and year-round tourism industry (Seaway Trail, Oswego Co., NYS DEC, 1991-95)

- Design and create better packaging of the existing sportfishing facilities and services in the SRGC and Mexico Bay Area (Oswego Co., 1991-93), and
- Promote the underutilized bass fishery resources on Lake Ontario and tributary streams and embayments. (NYS DEC, 1991-95)

The Salmon River Greenway Corridor Committee was thereafter established by the Cooperative Tug Hill Council in order to coordinate the involvement of a broad coalition of individuals, agencies and interests in the SRGC, to assess potential impacts of establishing a greenway and to provide direction for the establishment of the SRGC. As a result of this partnership the Salmon River Corridor Greenway Protection and Development Plan was commissioned in 1993 in cooperation with Salmon River Local Government Services Cooperative, Tug Hill Commission, NYS DEC, Niagara Mohawk, Oswego County Planning and St. Lawrence Eastern Ontario Commission

This plan listed three prioritized primary goals and objectives, recognizing that the goals were all important and mutually dependent on each other.

- Protect and enhance the natural landscape and open space environment along the Salmon River corridor
- Enhance and protect the quality of life for Salmon River corridor residents
- Increase economic development by improving public and private sector recreation and tourism facilities, services, and programs.

Balancing these goals and mitigating their impacts was important not only for the short term but also the long term. Issues, concerns and opportunities in the SRGC were identified. Limiting factors in the Greenway Corridor were recognized as a lack of public and private funding, limited local infrastructure to support greenway

development and management, limited recreational and tourism opportunities beyond those of sport fishing, lack of local sewer and water infrastructure to support an influx of tourists and potential degradation of the environment. This document was however the first step in creating a comprehensive, explicit land management and recreation development plan

In order to facilitate future planning and development of the SRGC, the Salmon River Greenway Committee, together with Oswego County and NYS, conducted a Salmon River Corridor Citizens Survey (1995). In this mailed survey, citizens of the SRGC responded that developments to be encouraged included:

- single-family homes
- skiing, hiking, biking trails,
- community parks
- fishing access trails
- nature interpretation areas.

Discouraged uses included:

- mobile homes and mobile parks
- apartments and multi-family dwellings
- retail stores and shopping centers
- light industry (warehousing) and heavy industry (manufacturing)
- entertainment/amusement facilities.

Results from this survey showed that the rural atmosphere and natural resources of the SRGC were the most important reasons for respondents living in or owning land in the corridor. Respondents in the survey wanted to use land regulations and ownership techniques to manage future growth in the corridor in order to:

- preserve open space
- control location and type of development
- control location and type of mobile homes

- control the location and size of signs
- require development to meet design standards
- encourage development in villages and hamlets

Respondents in the survey were also asked their opinions on the development of recreational/tourist facilities on the lands along the Salmon River and Reservoir. Most important was:

- Hiking/Skiing and Fishing Access Trail from Pulaski along the Salmon River
- Salmon River Falls Overlook Recreation Area
- Improve educational/tourist services at Altmar Fish Hatchery
- Trail/Environmental Education Center

Respondents were further asked what resources were important to them. These resources included:

- Pure groundwater and wells
- Clean streams
- Wildlife habitat
- Open Space
- Rural character
- Large blocks of forested land
- Wetlands and floodplains
- Productive farmland

Alternatively, increases in tourism, residential and commercial development were considered to be not important to these respondents.

In 1997 Oswego County released the Oswego County Comprehensive Plan, (*OCCP*) a document that has pulled together many disparate views, reviewed demographics and economics and set some goals with objectives for the future of the SRGC. The *OCCP* acknowledges that the SRGC has some of the best natural resources in the entire County, including the Salmon River and the Tug Hill Plateau. The Plan further

acknowledges the uniqueness of the River and especially Salmon River Falls. And while records of species protected under the Endangered Species Act are not abundant, the Biodiversity Study prepared in 2001 for the SRGC shows without doubt that the system merits the highest protection under Conservation Law due to its overall ecosystem values. Moreover, the Plan clearly concludes that the natural resources of the River, coupled with outdoor recreation values, are the focus of the Greenway Corridor's future.

New York State and SRGC have the opportunity to conserve resources lost forever elsewhere in the State and Northeastern U.S., and at the same time, can use these resources to drive the local economy forward. However, mechanisms must be found to bring together through communication the varied interests. For example, the "Salmon River Corridor State Forest Unit Management Plan" (1997) study notes that different forest user groups have different priorities, the property tax base must be balanced with the ability for land owners to generate income, development and environmental protection must be balanced to protect biodiversity, and meaningful employment must be available to prevent an exodus of youth, a statewide phenomena.

The *OCCP* objectives for the Salmon River area integrate modern environmental protection with development that places the correct amount of pressure in the most suitable areas, and thus seek to achieve sustainable development. For the Salmon River, the pressure to be ecologically sensitive is even more important because the area depends on the excellent water quality that supports the fishery, so that the conservation of natural resources is essential for the long range economic, social and environmental benefits to current and future generations. The preservation of traditional outdoor pastimes, plus the increased interest in modern outdoor pursuits (cross-country skiing, hiking, ice climbing, snowshoeing), requires conservation of ecosystems and access to large tracts of properly managed open space. Public education, participation and land

acquisitions are an important part of the Corridor's economic future, along with measures that benefit the public and visitors to the corridor.

Public interest is well served by the preservation and management of public and private forestlands for a variety of uses including harvesting of forest products, recreation, wildlife habitat, surface and groundwater protection, and air quality enhancement. This approach to the River's natural resources highlights the "management" of the lands, instead of merely holding such lands in trust. Thus, the County acknowledges that passive and active recreation must be blended with economic growth, and the commercial land uses that arise there from.

Accordingly, the *OCCP* recognizes that the County has as its greatest source of wealth some of the State's most pristine lands, yet they are close enough to major metropolitan centers to attract a large visitor-ship, and for the County residents to take advantage of the urban offerings in Rochester and Syracuse. Thus, the County has set a goal to develop a system of parks, recreation sites and open space areas linked with each other by greenway and trails systems.

The goals in support of economic growth in the SRGC identified in the *OCCP* include the development of greenways and trails in the Corridor to anchor open space planning, a focus on water-dependent recreation (the Salmon River itself attracts a significant part of the County's water-based recreation), promotion of the Corridor through development of environmental education, improvement of access to recreation opportunities through the existing transportation system (i.e., link the SRGC with the rest of the County), and generally support of efforts to satisfy the active recreation needs of County residents and visitors.

The *OCCP* highlights factors important to conservation of the SRGC's natural resources, as cited by the Biodiversity Study prepared for the County in 2001. The

River, with its roots in the Tug Hill, is a spectacular natural resource and if managed properly, is an ideal area for promotion of ecotourism. In recent years, tourists have ventured further into “out-of-the-way” places, and the SRGC may increase its visitorship through the development of the infrastructure to host and promote the SRGC amongst the growing domestic tourism markets. The best way to realize the County’s objectives in the SRGC would be to combine tourism, the fishery and environmental education into a new Center that offers education, recreation and relaxation, all close to home for so many Americans.

As part of the Greenway Committee’s focus on shared informational enhancement, residents of the Greenway Corridor were brought together for a series of workshops to which residents contributed their ideas on future land uses in the Greenway Corridor (2002). An important component of these workshops were to determine the concerns and preferences of a number of residents, on an individual basis, as well as those of breakout groups. These citizens responded to the basic question of where do they believe the categories of residential, commercial and conservation land uses most appropriate throughout the SRGC Corridor.

The summary of workshop results for land use preferences of individual attendees represents largely existing patterns, reflecting each attendee’s very local experience. Thus, residential locations identified are spread out along roadways that are presently lined with homes. Similarly, areas designated for commercial activities are those presently used for businesses, and show an inclination to spread commercial activity somewhat outside of the present focal points for such activity. The attendees identified a conservation preference for the areas already designated for, or transferred to, public ownership (i.e., DEC acquisition), as well as some noteworthy fishing and recreational areas. And while commerce is clearly to be focused in the village centers, with conservation focused at the mouth and headwaters of the SRGC, the location for residential land uses is more diffuse.

The workshops also produced results from breakout groups seeking consensus on the dispersion of these land use categories. The areas identified for residential land uses were less spread out by the consensus groups than those expressed by the many individuals involved, and were largely near the villages of Pulaski, Altmar and Redfield, where the most residential land use was identified. The area of Orwell, into the northwest corner of the Salmon River Reservoir was also selected for some residential development. The consensus groups located commercial activity in the hamlets and villages, some activity at the Route 3 bridge, and most noteworthy, at the crossroads of County Rte.2 in Orwell. The consensus groups designating for conservation the key water quality and fishery segments of the River and selected for conservation the River between the two reservoirs and the tributary inflow areas between Altmar and County Rte. 48, as well as the mouth of the River at Lake Ontario.

In summary, the workshops reflected a very common-sense approach to land use planning in the SRGC. For the most part, residential and commercial activities were identified in areas where these are already dominant, suggesting that the stewardship zone be made compatible with the existing and underlying patterns that have developed over the years. The need for conservation planning was evident in the fact that the areas designated for protection concurred with those recently identified as important to the River's ecology. And, in a move towards future growth, the group acknowledged a future for commercial and residential development in the hamlet of Redfield, and similarly in the area of Orwell, at a location where the core of a hamlet has already developed.

The NY State Urban Council and the Downtown Committee of Syracuse, Inc. (2001) prepared the "Downtown Revitalization Strategy for Pulaski," outlining the resources and opportunities that exist for the largest village, and current center of commerce, in the SRGC. The plan calls first for inventorying of natural and human resources, and

then sketches a pathway to complete planning for the downtown, and surrounding area. While this strategy is aimed at downtown, most of the principles apply to the entire SRGC with respect to developing their own future with a vision, rather than allowing things to meander towards no particular goal. Downtown and main street revitalization are national trends that have come into vogue over the past ten years. Downtown revitalization involves components of mixed-use development, development of a streetscape and re-use where feasible of buildings that no longer meet their owner's needs, but because of location could realize a new and vibrant use if renovated. Perhaps the most striking aspect of the Downtown Revitalization Strategy for Pulaski is that it emphasizes communication all along the SRGC, seeking to create a sense of commercial community beyond narrow interests or small areas.

A study commissioned for SRGC included a Visual Simulation Analysis, prepared by Architectural Resources of Buffalo (Jan. 2002), demonstrating how the aesthetics of the Greenway Corridor can be integrated into land use planning, and forms an important background to the Greenway Corridor's economic development. Certainly, the visual simulation provides good guidance on how to make the Greenway Corridor's commercial growth aesthetically compatible with the character of the communities. Combined with The Downtown Strategy that helps identify retail and other downtown resources, the visual analysis enables the steering committee to apply this information to design programs for future development.

The Salmon River Greenway Signage Plan Report and Recommendations was completed in April 2002 for the NYS Tug Hill Commission and SRGC. The Report describes the objectives of the Plan, explains criteria for selecting primary sites, and inventories the signage needs of the River Corridor (see Caddick, 2000). The objectives of the Signage Recommendations were to increase visitor awareness of local resources, orient visitors in finding the area's attractions and promote the economic benefit that visitors represent. The objectives were approached by:

- Developing an inventory of sites of interest and existing signage,
- Identifying the potential routes, primary sites of interest and feasible route alternatives,
- Integrating the jurisdictional requirements of NYS DOT and Oswego County Highway Department into a set of maps representing the findings of the study.

On the basis of the background research prepared for the signage Plan, a set of recommendations was developed. The Report concluded that:

- Signage indicating points of interest was generally sparse throughout the Corridor.

Three types of signs were suggested:

1. A series of signs is needed indicating that a visitor is traveling within the Salmon River Corridor.
2. Directional signs are needed at key “decision points,” or intersections where turns must be made to travel towards a particular destination.
3. Identification signs at the various destinations, indicating entrance, parking or other access provisions. The actual implementation of the Plan would require certain further tasks, such as selection of specific locations for Identification signs, selection of a logo for the signs, locating funding sources for the work and materials, and submission to appropriate agencies for permits where required.

In a recent study for the Town of Orwell, “Orwell Vision for the Future” (2001), the theme taken is to preserve the rural character of the area, enhance and protect recreational resources, all through judicious control of over-development in sensitive areas. Through a “Planning Accord for Tug Hill,” involving the Town of Redfield, the importance of local water quality is highlighted, as well as an initiative to conserve woodlands and protect fish and wildlife. Each of the newer studies and initiatives continue to recognize the intrinsic value of the River’s natural resources.

Themes common to all the planning documents and research to date include:

- Diversification of recreational opportunities – promote year round use
- Improvement of recreational facilities, access to sites and environmental interpretation
- Promotion of a tourist infrastructure
- Conservation of scenic and environmental resources
- Expansion of local government capacity

E. The Greenway Corridor and the River's Natural Resources

The challenge of sustainable economic development for this corridor is to capitalize on the River's economic potential while continuing to protect the resources that currently exist. Thus, an objective of economic development must be to create not only seasonal migrations into the Greenway Corridor for the fishery resources, but to increase other business and employment opportunities in recreation and tourism industries. These objectives, detailed also in many of the plans to date, are refined into a set of recommendations in this report with specific concepts for commercial ventures.

The Fishery and Ecology of the Salmon River

It is one of the remarkable stories of the 21st Century: a salmon fishery (along with other species) flourishing in the northeastern United States, within short distance of some of the Nation's oldest, most established industrial centers (i.e., Albany, Rochester, Syracuse, and the Erie Canal Greenway Corridor). The preservation of the Salmon River ecosystem is a glowing testimony to conservationists and the local populace. It is also a quirk of fate that can only withstand the test of time through a shared vision and the application of proactive land use planning. If the local economics decline, the impetus for conserving fish and wildlife will fall further from the top of the

list of priorities. The SRGC is a natural resource of unique value, but one that is presently not fully protected from the threat of adverse impacts associated with continuing development and use of the Greenway Corridor for recreational, residential and agricultural activities (see the SRGC Bio-Inventory by Dru Associates, 2001).

The Greenway Corridor is among New York State's most physically unique and biologically diverse ecosystems and is unique because of its geological origin, hydrological function and ecological richness. The geomorphology of the Salmon River and surrounding areas is the result of glacial movements, which left behind landforms that are not only dramatic but also contribute to hydrological patterns that drive the Salmon River. The surface and groundwater provide remarkably clean, cold water, which in turn support the world-renowned Salmon River fishery. In turn, the fishery supports a diverse and abundant avifauna (i.e. birds) and other organisms that feed on fish. This food web, which includes a substantial and self-sustaining assemblage of fish-eating predators, is an ecosystem that is unique not only in New York State but any adjacent State. The reliance of this interconnected food web, with its diverse and abundant species, upon the Salmon River's hydrology represents an ecological resource of tremendous scientific and economic value.

Along with the recognition of the value of the Salmon River resource, the NYS DEC has invested considerable resources in the SRGC in two programs, land acquisition around the Upper Reservoir and the Great Lakes Fish Hatchery and stocking program. While these programs represent a component of the needed investment in the Greenway Corridor, their long-range success hinges on pro-active management of land uses all along the River Greenway Corridor to protect water quality. It is evident from the research conducted for the SRGC Bio-Inventory 2001 report that certain environmental protection measures remain weak along the Greenway Corridor, most notably education and enforcement in land use practices, land-use regulation and storm-water management. These two spheres of environmental protection go hand-in-hand: if the

density and type of development are not considered within the Greenway Corridor, then protection from pollution of the groundwater and the River itself cannot be ensured.

Pursuant to the 1981 construction and subsequent success of the New York State Salmon River Fish Hatchery near the Village of Altmar and the stocking efforts by the NYS Department of Environmental Conservation, the character of the Oswego County Salmon River region has changed dramatically. The Salmon River has been transformed from a relatively passive recreational river into one of the most productive and heavily utilized sports-fisheries in America. For the past decade, tens of thousands of anglers have flocked to the SRGC in pursuit of the world's largest trophy salmon and trout and the Salmon River currently ranked by anglers as one of the top three fishing destinations in New York State is also ranked as the most unique and special of all the New York surveyed fishing sites. (NYS DEC Angler Survey and Sea Grant, 1996).

The once quiet communities are now seasonally overwhelmed by anglers not only in pursuit of trophy-sized fish and world fishing records but a relative abundance and diversity of fish. The 58,790 anglers in the SRGC include not only New Yorkers but also visitors from out of state. 15% of the anglers are attracted from the Syracuse area, 8% from the Albany region, 8% from the New York City Region, 19% from other regions, and 50% from out of state (1996 NYSDEC Angler Survey and NY Sea Grant). The estimated number of anglers fishing the Salmon River remained fairly stable between 1988 and 1996 with the percentage of total effort associated with salmon dropping from 47% in 1988 to 37% in 1996 and proportion of total effort associated with trout increasing from 36% to 40% during those years. The estimated number of anglers coming from out of state increased by 8% from 1988 to 1996, and at location expenditure increased by approximately 40% between the years 1988-1996 (1996 NYSDEC Angler Survey). While substantial controversy exists about the absolute value of this increase when examining 1988 estimates in 1996 constant dollars, it is clear that the SRGC economy benefits greatly from the fisheries.

Oswego County leads New York State in the number of anglers it attracts, with 114,130 per year and an estimated \$45.6 million a year spent on fishing in County (Oswego County Department of Promotion and Tourism, 2002). Furthermore, tourism is considered a major industry in the County, contributing more than \$166 million to the County's revenues. More than 1.2 million visitors are believed to vacation in the County (Dept. of Promotion and Tourism, 2002). The County has a substantial resource base in terms of parks, open space and recreational land uses (see review of existing recreational resources in Appendix IV).

The potential growth of the Salmon River Greenway as a tourist attraction could continue for many years to come. While local business may benefit from the seasonal increased traffic, the unregulated influx of sports-fisherman places a burden not only on the infrastructure of the six municipalities but also impinges on the rural quality of life. Therefore, both the protection of the River's ecology and the preservation of the area's quality of life demand careful planning of the Corridor's economic management.

F. Comparative Analysis of other Greenways and River Communities

A useful context within which one can improve an understanding of the SRGC's future is through consideration of other regions with similar character, in particular, other greenway or river corridors. An analysis of River Corridors and Greenway Corridors was performed through an extensive global search on the Internet. From this research it was apparent that there are certain common themes that are stressed in all these regions. These themes are:

- To harness the energy of the greenway or river corridor in new ways that will link the local community to diverse populations who will jointly participate in civic and cultural activities.
- To promote tourism along the greenway or river corridor, including eco-tourism, recreational pursuits and cultural tourism.
- To link through a multi-use trail system historic, scenic and natural resources in communities of the greenway or river corridor.
- To reconnect the citizens with their river heritage by inducing community action that counteracts the driving force behind “urban blight” and resource degradation.

Furthermore, inherent in all of these regions is the belief that the creation of greenways is critical to building sustainable communities and enhancing quality of life, and that greenways themselves stimulate economic development opportunities. For example:

“The Greenway and its development will serve as an economic stimulus for the valley...” (Raystown Greenway).

“As the greenway comes to life, it will promote economic vitality as well as provide badly needed recreational opportunities.” (Los Angeles River Greenway Program). The Trust for Public Land is operating in partnership with the Los Angeles River Greenway Program in their joint efforts to establish urban parks, and together they function through a process of community involvement that seeks to strengthen local neighborhoods as it provides new recreational resources.

Central themes of most greenway or river corridor programs include the following topics:

- Natural and cultural resource protection,
- Regional planning,
- Public access, and
- Heritage and environmental education.

Within the corridors reviewed for this report, there were various economic development concepts that involved local industry in greenway planning and implementation efforts. Moreover, various programs endorsed small scale, locally owned, and traveled related businesses, as well as the utilization of existing historic buildings.

Some useful examples were found of mechanisms to improve connections between communities spread out along a corridor. One example comes from the Fallkill Creek Greenway, where a system of trails links ten counties of the Hudson Valley and the Schuylkill River Valley National Heritage Area, which is a 130 mile long river spanning the four eastern counties of Berks, Chester, Montgomery and Schuylkill and the City of Philadelphia, Pennsylvania. Lessons learned from such examples stressed that multi-use trails themselves are an integral part of the development plan and offer a special opportunity for economic development in communities, linking businesses and amenities to form cohesive tourist destinations. There are a variety of measures that can be employed as an integrated program of linking the features of a typical community.

Repairing or restoring walkable linkages between neighborhoods, employment centers, community facilities, cultural features and the historic focus of the regions heritage. The purpose of “walkable linkages” is to “reweave the community fabric” as in Schuylkill Greenway. In these communities the goal of the Greenway Association is to help older communities “reconnect “ with the river and to provide a pedestrian connection to and along the river recognizing that supporting walkable streets is critical to the survival of downtown. Making these connections clear and safe is paramount in bringing neighborhoods together. To this end, continuous routes, wide sidewalks, marked cross walks, uninterrupted handicap access and adequate streetscape amenities (benches, lighting, trash receptacles) are the prime issues to formulating an inviting and safe experience and ultimately a connection. A renewed awareness of pedestrian needs

should be addressed in order to prevent further deterioration of the local economy. These issues have been specifically addressed in the reconnection of Hamburg and Shoemakersville in the Schuylkill Reconnections Planning Study and include

Historic Walking Trails – local interpretive trails highlighting historic sites, unique features, architectural and key destinations around the towns. Additionally, an interpretive trail will direct pedestrians and cyclists to key attractions and destinations within the towns. Signage should indicate the tour's route

Trail connection – potential exists for a formal pedestrian/bicycle route linking towns in the Schuylkill Corridor. Noted of importance are signs directing trail users to the towns as well as an interpretive route following the remnants of the canal, the river and other key sites.

Signage – the need for signage warning motorists of the existence of pedestrians and bicycle crossings is necessary at many locations

Improved gateways into towns – Entrances into towns needs to be pleasant and to enhance the town's image. While major changes to the gateways may be long-term improvements, short-term improvements would include signage and uniform street amenities such as landscaping and lighting.

Bridge improvements – The State Street Bridge in Hamburg, as an example, is a vital pedestrian/bicycle connection between the village of Hamburg and the remainder of the community.

Sidewalks and crossings – If the existing condition of the pedestrian sidewalks is poor, then improvements to the pedestrian/bicycle sidewalks will not only make them safe and usable, but also improve linkage. Provision for the maintenance of these sidewalks is important as well as the addition of appropriate pedestrian scale lighting. In most older communities, there are areas where sidewalks need to be added to complete pedestrian connections. Crosswalks need to be maintained by clearly marking the pavement. In the heart of a town these crosswalks should be constructed of a paving material rather than by marked by only paint.

Waterfront connection - public access should be enhanced and includes the acquisition of waterfront property as an investment for future access to the river.

Promoting a regional identity, and efforts to create an image that would attract visitors, are integral to the economic growth of an area such as SRGC, especially when the Corridor includes unique natural resources. For example, the Deerfield Valley of northern Massachusetts promotes itself through natural seasonal features: the spring Maple-sugaring, the late summer Lilac festival, and throughout the year, the Valley promotes its artists and crafts. On Long Island, the Town of Riverhead promotes its Polish Community with an autumn festival, a Country Fair and a Community Mosaic highlighting its human diversity, and a Winery Tour of the local vineyards, as well as the development of an Aquarium at the mouth of the Peconic River Estuary, featuring the fishing and marine life elements of the area.

Improving regional marketing, a task that goes hand-in-hand with promotional efforts, and elevates the promotional task to one of spreading promotional information through regional networks. These networks can be reached through television or radio advertising, such as the “I Love NY” program that spans the Hudson River, Erie Canal and New York City regions. In Pennsylvania, regional promotions for the Schuylkill River corridor employed murals depicting themes and history on factory buildings. For example:

Manayunk Industrial Mural, Philadelphia – reflects the history of Manayunk as it relates to the history of the Schuylkill River. This project is one component of an extensive network of public art in Philadelphia, and helps to educate local youth and tourists alike about the rich industrial heritage of the neighborhood

The adaptive reuse of old buildings and industrial buildings to serve the needs of artists, musicians and entrepreneurs can be a valuable asset. Moreover, the use of such

facilities for new commerce, blended with their use as interpretive centers, can add to an area's educational function. For example:

Waterwheel reconstruction project at Fairmont Water Works, Philadelphia. This project is part of the Schuylkill River Valley National Heritage Program and is partnered by the Philadelphia Water Department. Today the facility serves as an Interpretive Center with exhibits and public programs and an operating waterwheel.

The Foundry Building at Phoenixville, Chester County was purchased by The Phoenixville Area Development Corporation in 1998 and has been restored as a visitor's center for the Schuylkill River. Another example of the adaptive reuse of buildings is that of the Tamaqua Train Station in Tamaqua, Schuylkill County. This building is the centerpiece of the Tamaqua Historic District, and the adaptive design includes the Schuylkill River Valley Visitors Center, as well as restaurant space. Partnered in this effort is the community-based group the 'Tamaqua Save Our Station'.

There are many examples in the northeastern United States of such redevelopment and revitalization of areas which were historically important commercial centers, but which have declined due to modern shifts in industry, communication and transportation. In northwestern Massachusetts, where waterpower drove the industrial revolution in the 1800's, there are many small towns that have lost their populations as youngsters moved to Boston and Hartford. Colraine was a Town that used to fill several churches every Sunday. Two of these churches subsequently lost their congregations and were closed. Both buildings have been renovated internally and reused: one as a Town meeting house and the other as an "avant-guard" restaurant which draws diners from up to 30 miles distance because of its charm. This particular restaurant showcases art throughout, sells local canned and bottled goods, and features perennial gardens for summer dining (see photos). The State Park Heritage Center, North Adams, Massachusetts is a State funded park that integrated an old railroad

station, warehouses and factory buildings into a set of stores, museums and restaurants that serve many functions.



Figure 3a. Colraine, Massachusetts: An abandoned church



Figure 3b. Colraine, Massachusetts: The same abandoned church converted to a garden restaurant.

In southern Vermont, in the Town of Wilmington, which is a hot growth area because of its outdoor sports attractions (winter primarily but all-seasons also), a former church was converted into a magnificent art gallery, Young and Constantino. This gallery attracts commissioned artists from Boston, Hartford and New York. Most artwork, furniture, jewelry, glasswork and other merchandise sold are on consignment (see photos).



Figure 4a. Exterior of a former church in Wilmington, VT converted to an art gallery



Figure 4b. Interior of a former church in Wilmington, VT converted to an art gallery

In both the Massachusetts and Vermont communities, these businesses are privately owned and have been in operation for years. These striking community landmarks are now back on the tax rolls as thriving businesses. In Hanneford, New York, the Town has taken advantage of its historic mills, and created a museum with hands-on experiences for the visitors.

In the City of Stamford, Connecticut, an entire cottage industry has arisen, guided by the Historic Neighborhood Preservation Program, Inc. Here, the City encourages builders and landowners to find value in old homes and streets, and remarkable investment has occurred in both old real estate and communities. The Preservation Program offers grants to research old industries, and makes use of the information to promote redevelopment. In Stamford's Master Plan 2000, there has been a strong commitment to historic neighborhoods, and in return the City government has gleaned substantial help from those with vested interests in the old parts of Town. The City even became involved in antique bridge preservation and has committed resources and planning effort to the preservation of such landmarks.

The **financial resources** needed to achieve these types of projects come from many sources (see Section on Funding Sources, pp xx). Some of the best success stories include the local enhancement of small business and home restoration loans, programs that local government can promote in helping local entrepreneurs to be part of redevelopment.

Finally, there are some **community activity elements** common to all of the greenways and river corridors researched for this report. The efforts noted in Connecticut, Massachusetts and Vermont demonstrate the synergy that can come from any community activity, and there are certainly similar positive effects that can be transmitted throughout the entire SRGC. While this can seem threatening to residents fond of their isolation, the results of the County public workshops shows that people

throughout the Greenway Corridor recognize that they are part of the planning for the entire community.

The SRGC can take examples from these other regions, and develop “community days” and “sports events.” A sample menu of such events include:

- ◆ Schuylkill River weeklong Sojourn down the river
- ◆ Cargo to Extinction – traveling exhibit of wildlife trade sponsored by the World Wildlife Fund
- ◆ Restoring Mill Creek – Teamwork between Bryn Mayr College and Lower Merion Township to restore a highly degraded section of the creek.
- ◆ May Birding: Migrant Menagerie; Explore the remnant woodlands of Wynnewood Valley Park and wander along the quiet stream searching for woodland birds
- ◆ Walk for your Watershed: one, two-, four- and nine-mile walk. Participants obtain pledges of donations for any of the four walk levels selected. Proceeds to go to Green Valleys Association’s mission to protect, educate, and preserve the watershed.
- ◆ Pennsylvania Hiking Week – event held to highlight hiking opportunities on trails located within county, municipal and other properties.

In many Greenways, there are seasonal/semi-permanent educational facilities, with interpretive resources, open to the public and visitors:

- ◆ Interpretive trails- NC State University included the Catawaba River Greenway Park in a tree survey, creating an interpretive trail identifying trees and vegetation throughout the Greenway
- ◆ Interpretive brochures – for example, the creation of an anthracite tour brochure in Schuylkill County by the Visitors Bureau.
- ◆ Signs and markers – for flora and fauna, heritage sites and landmarks, as is now common in parks such as Central Park in New York City, or the Botanical Gardens found throughout the nation.

◆ Scenic overlooks – to assist with natural or historic interpretation, located along traveled roadways where people can take a break from driving, view and come to understand the vistas of a given Town, and be attracted to distant landmarks, leading to more exploration in the local community.

◆ Interpretive centers or visitor's centers, now more and more common along highways.

◆ Kiosks at appropriate locations, to provide drinks, snacks and information to travelers.

◆ Promotion through the Internet, where many organizations have created Web pages, featuring attractions of an entire greenway corridor.

◆ County extension educators, with good supplies of maps and local promotional information.

In the studied greenways and river corridors, as well as many types of tourist destinations, it has become critical to provide amenities for travelers, such as:

- Picnic shelters and open tables
- Children's playgrounds
- Sports fields
- Bathroom services; ADA compliant rest-rooms, preferably open year round
- Paved, handicapped accessible walking trails
- Gazebos
- Boardwalks
- Foot bridges over rivers
- Community gardens
- Pushcart vendors

Inherent in all of these studies is the need for appropriate infrastructure development and planned improvements, established through a partnership of all parties residing in the Greenway.

II. Economic Opportunities

This Sustainable Economic Development Plan integrates the background research reviewed above and describes some specific economic opportunities gleaned from others regions. The economic opportunities identified by this study are discussed, first as Corridor-wide concepts, and then, within each community, in terms of economic niches remaining to be filled within that area. Within each topic, a brief assessment is provided of the “possibilities” for growth, as well as the “limitations” applicable to the SRGC in its present circumstances.

The SRGC is a region in transition. While traditional patterns of land ownership still exist in the region, and much of the land is still undeveloped, modern economic forces will not allow the area to prosper without acknowledging and adjusting to certain realities.

- ◆ The Salmon River is its greatest natural resource and asset.
- ◆ Piecemeal land use development cannot continue if the greenway area is to be maintained for future generations and regional land use management must take place.
- ◆ Aggressive industrial or commercial development in the Greenway Corridor, unless it is carefully managed, could threaten the river.

It is important to note that educational outreach is necessary to link economic growth to traditional commercial and recreational values. Moreover, through educational programs, local landowners can learn how to preserve their property values while participating in the environmental conservation programs that go hand-in-hand with economic management. The people of the SRGC retain a strongly rural profile, so that new economic development initiatives cannot simply be copied from other regions without considering the unique attitudes toward land use planning of the residents of the Greenway Corridor. Local residents would need to be shown why any new economic growth is necessary, and the first attempts at such growth would need to integrate them

in pursuits that are familiar to them. This translates to fishing and outdoor recreation on the one hand, and independence from unnecessary regulatory interference on the other.

The planning process addressed in this Study includes:

- (1) Inventory of the Greenway Corridor's resources;
- (2) Site Analysis and Evaluation to determine appropriate areas for:

- Preservation

- Restoration

- Water Quality

- Recreation – recreational and park system needs assessment

- Education

- Access to cultural and natural resources

- Interpretive signage

- Special events and festivals

- (3) Continued community participation in:

- Fundraising

- Public information drives

- Identification of stakeholders

The planning for the SRGC's future began with inventories of the resources (1), and is being followed by identification of the opportunities to promote the economic "harvesting" of these resources (2). Thus, the analysis of the SRGC is in the process of evaluating the Corridor to determine where various activities should be focused. The involvement of the public has been integrated into the overall process (3). This Study contributes to each objective within the bounds of the initial scope.

The activities and recommendations presented in this Study are intended to achieve the following goals:

- ◆ Provide a job base in conservation-related activities;
- ◆ Promote the natural resource values of the Greenway Corridor, and;
- ◆ Achieve an integration of the “tourist” and “resident” interests in the Salmon River.

A. Environmental Tourism: Corridor-wide opportunity

The various studies reviewed herein, including the County’s planning efforts, can be distilled to one over-riding principle: future growth in the Salmon River area must be premised on environmental protection, with commerce related to the Corridor’s traditional pursuits and the river’s cultural history. In the modern era, that translates to “Ecotourism,” or the attraction of visitors through the promotion of an area’s cultural and natural resources. In a review of other greenway and river corridors, it is evident that economic growth spreads from a given area’s primary resource to the associated resources surrounding the focal point, always featuring an area’s history and culture. In the SRGC, the River and its fishery are the historic focal point, but the woodlands, wetlands, and nearby Tug Hill Plateau offer other activities beyond the fishery, and therein lies the future of economic growth in the SRGC. It seems that coordination, communication, and promotion are the challenges facing the Corridor.

Ecotourism fits with the SRGC because it features many of the concepts revealed by previous studies, the community workshops and the bio-inventory work completed for the County in 2001: ecologically sensitive use of lands and resources to promote a self-sustaining industry that conserves the non-renewable resources of pristine water quality, biodiversity and a robust fishery. These are the basis of the local culture and, economically represent the immediate future.

Possibilities

- Scenic locations
- Diversity of attractions and resources
- Diversity of visitors
- Community involvement
- Educational activities for visitors
- Outdoor recreation opportunities
- Themed tourist development
- Business diversification

Constraints

- Limited infrastructure development
- Regional tourism planning
- Coordinated marketing and promotion

B. Agritourism: An Opportunity Adjunct to Environmental Tourism

In this ‘new world’ of people seeking vacations closer to their home additional opportunities have arisen. In “Considerations for Agritourism Development,” a study funded by the NY Sea Grant Program and cooperatively researched by NY Sea Grant, Cornell University’s Farming Alternative Program, Cornell Cooperative Extension of Oswego and Niagara Counties and Seaway Trail, Inc., questions were addressed such as what can the farming community offer to visitors, and what economic future is there for the farming world in general. Their results are important in light of the recent surge of farmland protection programs throughout the State and Northeast Region. And there is a direct link with the environmental community. In many parts of the State new laws and programs are aimed at preserving the traditional farming communities, many of which have been sold off for residential and even commercial development. Both the

agricultural and environmental community see this trend as a threat to our history and to the quality of life, as well as the potential for the loss of open space.

Agritourism is defined as the diversification of farm operations to include services and products designed for visitors. These services and products include farm stands, u-pick operations and farm bed and breakfasts. Agritourism tries to expand existing enterprises, create new farm markets and farm festivals, tying them together on a regional level to attract visitors. Agritourism is presently New York's second largest industry. In a May 2002, Diane Kuehn, a coastal tourism specialist with NY Sea Grant and Duncan Hilchey, an agriculture development specialist with Cornell University's Farming Alternatives Program looked at roadside enterprises, as well as more formerly organized tourism-related pursuits. Their study showed that over 50% of customers for farm stands, maple producers, Christmas tree farms, u-pick operations, etc. come from the home County. This is encouraging for local income generation and should be developed wherever possible. On the other hand, farmstead bed and breakfasts, wineries and special displays attract more of their visitors from outside the area. The agritourism operations have a strong attraction for females; females are present in groups visiting agritourism sites 98 percent of the time, particularly customers 55 years of age and older, which are visitor-types underserved in the SRGC. Customer survey results show that close to 75% of visitors travel to agritourism sites with family and 31% with friends. Close to 50% of those surveyed were repeat visitors to agritourism sites and had learnt about such sites through word of mouth. "Our business owners survey indicated that customers connect their visits to agritourism sites with other activities, such as visiting parks, festivals and historic sites, and while they are camping fishing, boating or hunting nearby," says Hilchey. "Sampling of local foods and wines and picking produce were rated as future activities that would draw visitors to agritourism sites."

While agritourism has enormous potential for states such as New York with large rural areas in providing diversified recreational agricultural experiences not only for visitors but local residents, it also provides farm owners with the opportunity of expanding the profitability of their businesses and in many cases survival of farms. Some of these enterprises may begin by participating in the Pulaski Farmers Market (p.13).

A good example of agritourism in Oswego County is that of orchards, where visitors can pick, eat, drink and take home New York's fine apples and other fruits. In fact, the Oswego City Chamber of Commerce chose Ontario Orchards as the 2002 Business of the Year, a reflection of the strength of this industry in the County. Many tourists traveling the Seaway Trail visit this operation, which has grown from a modest farm stand to a place that offers trees, shrubs, landscaping and fresh baked goods. Possible links need to be explored with companies such as this with a view to expansion of operations in the Greenway Corridor. Sherry's Blueberries (Albion) and Grindstone Farm (Pulaski), existing enterprises have potential for agritourism expansion. Research however, needs to be conducted as to the viability of the promotion of agritourism in the SRGC, an area with limited agricultural districts. Success of such an agritourism program in the SRGC would necessitate the careful co-ordination of events, promotional materials, and farm businesses through regional planning. The 'Grow NY Enterprise Program' grant could be a possible source of funding in assessing the potential for expanding agritourism in the SRGC and well as the assistance of the CCE.

Possibilities

- Diversity of attractions and resources
- Community involvement
- Educational activities for visitors
- Outdoor recreation opportunities
- Themed tourist development

- National Scenic Byway Designation

Constraints

- Limited agricultural districts
- Regional tourism planning
- Coordinated marketing and promotion

C. Antiques/Collectibles

A relatively unexplored theme within the Salmon River Greenway Corridor is centered on the pursuit of “collectibles.” For this context, collecting is defined as a “social activity giving a focus to travels and shopping” (Collector’s Style, 2002). As one featured collector in this book says “Collecting, is an acquiring of things for us, probably an obsession, but a very good one.” Whatever the objects, collectors are drawn to the dynamics of the hunt, “...the anticipation, the act of combing flea markets and shops for the elusive find, and the triumph of holding the quarry in their hands” (Collectors Style, 2002). The growth of “collectibles” has been associated with classical “antiquing,” a long established “hobby” of immense economic potential. However, these pursuits rely on an established traffic in visitors, and would likely only develop in the SRGC as other “attractions” bring people to the area. Nevertheless, there is already some of this activity just outside of the Corridor, at the Hillside Market’s Flea Market. The growth of popularity of “flea markets” and other open air markets has been significant throughout the State and region, and the SRGC can build on this trend by encouraging small scale projects to being with, and gradually increasing these activities as the public responds. The pursuit of collectibles and antiques enables homeowners to “clear out” old “junk,” often to the delight of visitors seeking something “different” on their travels. The local involvement and source of items for sale give this opportunity the advantage of not requiring significant facilities investment. In contrast,

this opportunity does not represent a large economic potential, but a useful one in the context of a broader appeal to a wide variety of people who visit the Corridor to participate in other activities.

Possibilities

- Diversity of attractions and resources
- Community involvement
- Themed tourist development

Constraints

- Limited existing interest locally
- Regional tourism planning
- Coordinated marketing and promotion

D. Existing and Expanded Promotional Opportunities

The SRGC has seen the development of certain public relations activities, and the existence of some promotional campaigns has set the stage for opportunities to expand promotional efforts. The existing initiatives are:

- Designation of the Tug Hill region by the I LOVE NY promotional campaign as the 2003-2004 I LOVE NY Winter Festival.
- Seaway Trail (Appendix III). The promotion of the SRGC as a primary tourism destination via the themes of sportfishing, coastal recreation, and natural resources with

the strategy of creating a more comprehensive and year-round tourism industry continue to be developed. Publications include:

“Journey Along the New York State Seaway Trail,” a publication that highlights the Seaway Trail’s Top 100 Calendar Events

“Oswego County 1000 Islands”

- Oswego County – Dept. Promotion & Tourism. The County continues to expend effort on attracting visitors, for e.g., “Salmon River! A Guide to the Attractions of the Salmon River Greenway.” Included in this interpretative guidebook are vast amounts of information including the major interpretive elements of the salmon/trout fishery, history of the coast, and energy production as well as maps locating automobile and bike route. However, this guidebook is not readily available and presently out of print.

The design and creation of better packaging of the existing sport-fishing facilities and services in the SRGC is evident in “Fishing and Hunting in Oswego County,” a personal guide aimed at making fishing... “More Enjoyable, More Convenient – and More Successful.”

- Tug Hill Recreation Guide-5th Edition, guide to Cross-Country Skiing, Hiking, Biking, Canoeing/Kayaking and Fishing Access on Tug Hill, published by Tug Hill Tomorrow (2003) and also available on the Internet at www.VisitTugHill.com

- Pulaski Eastern Shore Chamber of Commerce – Aerial Photo Guide, Salmon River Visitors Center Brochure

- Altmar-Albion Business Association – Altmar-Albion New York

- Tug Hill Business Association

- Internet- additional links for information are available through web sites such as www.CNYSummer.com, www.CNYFall.com, www.co.oswego.ny.us and

www.VisitTugHill.com to name a few, as well as many commercial and organizational web sites.

***Signage and Information, Roadways, Shops and Lodging:**

The Internet sites that present information on the SRGC are useful, and for the traveler motivated to find something new and exciting, it is likely that a person looking for a vacation which features natural resources will indeed discover the Salmon River. However, the holistic attraction of the River will not be found, but rather disparate pieces of information on one or another of the features of the Corridor.

For the average visitor to the SRGC, it is possible although difficult to obtain all of the information needed by visiting one information center. Although the kiosk on Route 13 intended for this purpose is an excellent resource, it is not readily found without some directions, it is poorly signed except right at its location, and its location is not central to the traveler. And while the kiosk is central for the fisherman, these are not the visitors that need ready access to the information, since they were already attracted to the area for the fishing.

In order to meet both of these needs, i.e., holistic River Corridor information in one location (either at home before the trip or in the region during the trip), the SRGC has the opportunity to link information on the various attractions of the Corridor. Information links through the internet can be improved such that, if a fisherman finds a Salmon River fishery report, that site is linked to one which provides information on accommodation, or a site which details trails for walking or snowmobiling. When a visitor arrives in the Corridor, it should be easy to obtain a guidebook for all of the activities available in the Corridor. Not only will this be useful during the trip, but also if the book covers activities in all seasons, it will encourage return visits. But the guidebook must be placed near major intersections (e.g., I-81 and Route 13) and in many stores or Town centers.

Possibilities

- Diversity of attractions and resources
- Community involvement
- Educational activities for visitors
- Outdoor recreation opportunities
- Themed tourist development
- National Scenic Byway Designation

Constraints

- Limited funds for guidebook
- Requires regional tourism planning
- Coordinated marketing and promotion

E. Environmental Education

There is a mechanism available for blending the objectives listed under the Seaway Trail and County programs, as well as many of the initiatives discussed in Niagara Mohawk documents. The mechanism is one that has already proven itself in New York State: the development of a year round and/or summer destination educational facility such as the YMCA Frost Valley site, or the NYS DEC DeBruce, Colby, Pack Forest or Rushford Camps. A new camp developed in the Greenway Corridor would be aptly named the Salmon River Education and Research Center. (Appendix IV).

NYS DEC Environmental Education Camps

For more than 50 years, The State Department of Environmental Conservation (DEC) has provided weeklong residential camp programs in conservation education for young New Yorkers. These DEC camps offer youth the opportunity to become immersed in conservation with activities that teach the wise use of natural resources. The DEC camp program consists of a variety of workshops and activities designed to assist the campers in becoming more aware of their environment and to also stimulate their desire to foster life-long environmental stewardship. These workshops and activities, which focus on learning and recreation, are conducted outdoors providing the camper with direct and diversified hands on experiences. Workshops focus on subjects such as group dynamics, principles of ecology, fresh water communities, field communities, forest communities and human communities.

Frost Valley YMCA Family and Conference Center

Today the Frost Valley YMCA Family and Conference Center, accommodates more than 30,000 guests annually. Many of the guests are repeat visitors returning year after year. Frost Valley YMCA is located on 6,000 acres of forestland, encompassing the two branches of the Neversink River. Frost Valley is situated 110 miles northwest of New York City in the heart of the Catskill Mountains and is surrounded by 240,000 acres of “forever wild” Catskill Forest Preserve. Frost Valley considers itself not only a conference center but also an environmental education, camping and cross-country ski facility and winter recreational center. Scenic mountains, forests, streams and waterfalls complement the extensive trail system for all levels of skiers. Frost Valley prides itself on “great food and lodging, outstanding meeting facilities and, most importantly, unique opportunities to learn and grow in spirit, mind and body” (Colin Campbell, Director).

The demand for such facilities is so extreme that School Districts who hold reservations, for example at Frost Valley, dare not fail to renew each year. The

combination at DeBruce of a Fish Hatchery and summer camp is widely respected and at the Salmon River, there could be the added dimension to such a facility of a World Class Recreational resource, close to a major population center. At the Salmon River Education and Research Center, there could be a partnership between SUNY, NYS DEC, IDA and such groups as the Nature Conservancy, and even input from conservation-minded commerce, such as Orvis, Cabela's, etc.

The Salmon River Education and Research Center (SRERC)

The County and State, in concert with the municipalities, expand the Salmon River Fish Hatchery into a major facility at which educational and research programs are offered, for both local groups and visitors, eventually creating a “camp” like offering that attracts schools and other groups to a residential program (e.g. 4- 5 day stays). The educational theme would be grounded in the Salmon River’s geology, hydrology and ecology, with entertainment focused on outdoor recreation. The goal of the creation of this center would be to create a year round destination-oriented center.

Within this Plan, extensive explanations of the types of camp programs offered elsewhere in New York (Appendix V) are provided to demonstrate the range of possibilities and the great success these facilities have exhibited. Such an operation can provide many local jobs, and bring visitors into the region, thereby contributing to the diversity of recreational opportunities in the Greenway Corridor. The facility could also be made available to academic researchers for on-site research projects, graduate student participation in education and faculty opportunities to become involved in the course offerings. As described in the Appendix of this report, YMCA has teamed with State and private universities to enhance their Frost Valley facility.

The environmental education theme of this proposed Education and Research Center supports this Economic Development Plan's theme of "Environmental Protection of the River and its Fishery." The mutualism between the River's resources and the proposed Center are also already underpinned by the State's significant investment in the DEC Fish Hatchery. There are also already present in the Greenway Corridor some professionals who could be instrumental in launching a partnership between the State, the local people, nearby Universities, and perhaps the YMCA, Sierra Club, Nature Conservancy and others.

Salmon River Rangers (a program of SRERC): Economic growth in the SRGC must integrate the local traditions of outdoor recreation, and at the same time create an environment that protects the natural resources that underlie the fishery and natural beauty of the River. The circumstances required to realize such growth are unique, just as the River itself is unique. Accordingly, this Plan envisions the creation of a Center for education and research, focused on the River but attractive to visitors from all over the Nation. In order to optimize the visitor's experience, they should meet and interact with the local population, since they are integral to the unique character of the Greenway Corridor. Similarly, if the growth envisioned is to work for the local residents, they should have a key role in the new enterprises that develop, and their involvement should begin at a young age, not just as mature entrepreneurs.

The proposal for a Salmon River Education and Research Center includes the need to link activities at the new Center with recreation all along the Greenway Corridor. The proposal also calls for adherence to the principles of environmental protection expressed in the Bioinventory Report of 2001, which highlighted the lack of enforcement of environmentally friendly practices along the Greenway Corridor.

The best way to achieve the goals of information, protection and economic return is to create a "force" of local people who spend time in direct contact with visitors out

along the River: the Salmon River Rangers. This group would be comprised of several layers, beginning with designated educators at the new Center, some paid supervisory staff patrolling the River, and a corps of youngsters trained and outfitted as the person-power in the field. These Rangers could be posted at Kiosks located at key points along the River, locations where a visitor could purchase their Salmon River guidebooks and also get maps, directions, regulations and general hospitality from the people who live in the Greenway Corridor.

This concept is not new, since in the 1980's New York State and New York City joined hands in creating the Urban Park Rangers, who now provide information, education and, through their presence in New York's Parks, an added level of security. The Rangers program can provide some jobs, perhaps funded by the special license and grants from programs aimed at helping keep young people occupied in constructive pursuits.

A similar program is that of the partnered 2001 New York Sea Grant, the Nature Conservancy, and the NYS Department of Conservations Dune Internship Program utilizing college students as Dune Stewards on Lake Ontario's eastern shores. This dune stewards program began on Sandy Pond Beach, which was becoming extremely busy and represented a dichotomy of heavy recreational use and sensitive, rare and endangered sand dune communities creating a challenge in terms of management and environmental protection.

“The dune steward program was so successful that we saw a major rebound in the health of the dune system. The shift of visitor use to other sensitive areas, however, created the need to expand the program along the shoreline,” Dave Forness, Supervising Forester with NYSDEC Region 7, Cortland explains. “This expanded internship program brings together several state and county agencies, two regions of DEC, lands and forest and fish & wildlife staff, the Nature Conservancy, New York Sea Grant and

the Friends of Sandy Pond Beach. It is unusual to have government agencies and not-for-profits working so closely with a shared mission and goal.”

Dave White, NY Sea Grant Great Lakes Program Coordinator continues, “...the interns will benefit from the learning experience while the shoreline benefits from the students’ contact with public regarding the value of the natural resource. The interns’ project work may also produce significant data for future shoreline projects.” Intern study areas have included wildlife, habitat management, and interpretation with the opportunity to lead field trips not only for area residents, but also campers and tourists. While the role of the dune stewards will be to educate the public they will also assist in alleviating environmentally damaging activities. This program also allows the students to interact with a wide range of individuals ranging from summer only visitors to life-long residents, from children to seniors all with varied interests in wildlife, habitat and environmental protection and recreational use. Interns in the Sea Dune Program may meet and greet visitors, provide guided walks, bike rides and even conduct fishing programs.

Such a program offers many potential benefits for the residents of the Greenway Corridor. The Rangers offers an exciting opportunity to provide Community Service, which should be attractive to School Districts. The local law enforcement community could take advantage of a ready audience for education and training in law enforcement and community security. The youth of the Greenway Corridor might even find this program to be a positive outlet for social activities, and offers them something constructive to do within the traditional outdoor recreation pursuits so widespread already in their community. And who better to guide the Visitors to the Greenway Corridor than the young people who one day will be the business and community leaders of the region. If this population does not take an interest in conserving the River’s resources and managing their own environment, they may not have it for their own children.

Possibilities

- Diversity of attractions and resources
- Community involvement, especially of youth
- Educational activities for visitors
- Outdoor recreation opportunities
- Themed tourist development
- SUNY and NYS DEC expanded involvement
- National Scenic Byway Designation

Constraints

- Limited facilities at present
- Regional education and tourism planning
- Coordinated marketing and promotion

F. Expansion of the Salmon River Greenway Corridor's Recreational Activities

The SRGC offers all season recreation that could appeal to any type of visitor, be they families, couples, young or old. The SRGC has already been recognized as having enormous potential for nature education, interpretation and environmental study and has the potential to be a model for natural education, interpretation and environmental research (OCCP, 1997). A review of the existing recreational resources is presented in Appendix IV. Interest in developing interpretative programs for all of the major resource areas has already been expressed by many SRGC residents and organizations.

While the salmon fishery is the key to recreation in the Greenway Corridor, it was evident from the Bio-inventory of the SRGC that there is a limit to the number of fisherman that can use the River. But this limit does not have to limit the economic growth in the Greenway Corridor because there are other ways to attract people to the Greenway Corridor. Simply attracting the family of the fisherman would vastly increase the number of visitors, and they would all seek recreational activities of their own. Educational and family activities associated with the River's natural resources can be added to the Greenway Corridor's economy above and beyond the services already provided to the fisherman. And these activities are not mutually exclusive, but rather complementary.

The potential for economic growth in the commerce of accommodation, food and retail sales is only as large as the potential for attracting visitors. While there are shortages of the most desirable accommodation during some seasons (for e.g., Winter in Redfield, Autumn in Pulaski), the demand can be expected to grow proportionally to the increase in recreational opportunities that differ from snowmobiling or fishing. With the Education and Research Center, the existing attractions and a coordinated cohesive effort by a Parks and Recreation Commission to fully develop activities, the number of visitors to the area would not only have a baseline, but also opportunities for large influxes for special events or weekends. Perhaps the most exciting opportunity that could be brought to the Salmon River area would be the jobs offered for local people, some within the facility, and many more as service industry to the visitors.

Possibilities

- Diversity of attractions and resources
- Community involvement
- Educational activities for visitors
- Outdoor recreation opportunities
- Themed tourist development

- National Scenic Byway Designation

Constraints

- Requires regional tourism planning
- Coordinated marketing and promotion

G. Private Sector Niche Development

In examining possible sources for private sector development, the Guttman model tabulations provided guidance as to which enterprises were absent from each area of the Corridor.

Male oriented services are missing in certain sections of the corridor.

In Altmar, Albion, Orwell, Redfield and Richland there is the absence of:

Laundromat

Carwash

Auto parts store

Liquor store

There are also a limited number of gas service stations in the area.

While auto repair and body shops are services found in the corridor they are notably absent in Orwell, Redfield and Richland. These services are predicted to occur in Orwell and Redfield (Eberts & Ververs, 2000) and are therefore enterprises worth considering in these areas.

While restaurants are one of the most common services provided in the SRGC, diversity of restaurants is extremely limited. Limitations are found in ethnicity of food served as well as presentation of services. Restaurants for the most parts do not cater to families and children. Other limited types of food service include the lack of ice cream stands or stores, coffee shops or an old-fashioned soda shop. While numerous bars and taverns do exist, their market is narrow and concepts such as a micro-brewery concept is worth pursuing, especially in Pulaski.

Female related services also show a gap in the corridor. Missing niches include the absence of antique stores, gift shops, bookstores and high-end boutiques. While beauty shops are found in most areas of the SRGC, one is lacking in the Orwell area even though predicted. Day spa facilities are absent in the SRGC. An old-fashioned Country Store is a niche missing in the entire corridor, a service that could appeal to visitors of all ages. Another niche worth exploring is the showcasing of private artisans at their place of work; a concept developed along the Mohawk trail in Vermont where signage directs travelers to potters, glass blowers and iron smiths to name a few.

The range of accommodation services in the SRGC is also limited with respect to diversity. Bed and breakfast enterprises are limited, as are cottage type accommodations, and the majority of services cater to the male population. Accommodations are also not particularly family oriented.

Recreational service gaps are noted in most of the corridor with the exception of Pulaski. These gaps are particularly in the form of:

- Bicycle shop and rental

- Snowmobile shop and rental.

- Cross country ski and rental.

A four-seasons, all sports store is worth considering especially in the Tug Hill Region of the corridor. Potential currently exists within the SRGC to not only realize recreational-related economic development opportunities both in the service and facilities industries but to also expand those existing services and facilities.

III. Sources of Revenue

A fiscal impact assessment of the future growth potential for the SRGC is not a part of this study. Therefore, the ideas raised by this study must later be analyzed for their quantitative potentials and limitations. However, the sources of funding that are associated with the types of economic development proposed herein are reviewed here to initiate the fiscal analysis yet to be done.

As an initial context for this topic, some simple arithmetic is offered here to demonstrate the potential for growth, and to encourage local entrepreneurs to research their own potentials.

A. Salmon River Fishery

The primary revenue generator for the SRGC is the influx of fisherman during peak seasons, as well as the steady stream of fisherman in other seasons. The following Table summarizes the fishery potential.

Table 2: 1996 numbers of anglers, angler effort and expenditures on the Salmon River by New York State media regions*

NY State Media Region	Number of Anglers	Angler effort in days	At-location expenditures
Bordering the Salmon River			
Syracuse	8,680	56,910	\$715,750 .00
Other NYS Media Regions			
Albany	4,690	27,200	\$1,308,360 .00
New York City	4,890	32,990	\$1,543,360 .00
Other	11,390	68,190	\$1,503,510 .00
			\$10,708,222
Out-of-state	29,140	179,210	.00
Total	58,790	364,500	\$15,779,200

* Data based on combination of statewide and Great Lakes surveys. Data collected through Sea Grant NY, NOAA, Department of Commerce, Cornell University and SUNY.

Table 2 reflects a minimum revenue generation of \$15,779,200 million for the primary activity of fishing. If one fourth of these people included one family member, that alone would increase number of visitors to the SRGC by approximately 14,700 visitors. Alternatively if one fourth of these visitors included significant others and 2 children, numbers of visitors to the SRGC could be increased by as much as 45,000.

1996 Per day expenditure (NYSDEC Angler Survey) was higher for out of state residents (\$57.03 a site, \$13.08 en-route) than for in state residents (\$13.08 at-site, \$5.74 en route). These data also reflect an increase of approximately 40% from data collected in 1988. Conservatively, if 25% of anglers could be induced to include one guest, revenues into the SRGC would increase by \$3,944,800. Current recreational revenue of about \$15 million could be increased by almost 12 million if a conservative number of family members had even a modest set of activities in which to participate. These data are however based on the assumption that fishermen are willing to have their family vacation with them. In order to pursue this line of reasoning it would be necessary to survey fishermen and assess their vacationing priorities.

An example of development for family entertainment is found at Hanneford Village in central New York, a historic site where the old time practices in agriculture and crafts are featured. The conversion of old Churches or other buildings (e.g., former post office in Altmar), around which local trades and crafts can be developed. And of course, Altmar could be center of activity for the visitors to the Salmon River Education and Research Center. In Wurtsboro in the Catskill region, a former church was converted into a retail shop, with a restaurant in the cellar and a Greenhouse and Nursery in the yards.

It would seem possible that New York State would support a research and education initiative if the planning studies continue to converge on the one common theme for the SRGC: ecotourism and environmental education.

“New York’s unique natural resources are a significant part of the quality of life in our state,” said governor George Pataki in a January 25, 2000 Press Release “Whether it is a hike along a secluded mountain trail in the Adirondacks, a boat ride on Lake Ontario or Long Island Sound, or a family visit to one of our state campgrounds, our public lands and facilities enrich the lives of nearly all New Yorkers.”

“It is important that we continue our unprecedented open space land conservation program by investing now in stewardship of these lands so that the public can enjoy them for generations to come,” Governor Pataki said. He further added; “Our continued commitment will ensure an enduring outdoor conservation legacy for the 21st century.” These announcements highlight a commitment by Governor Pataki to provide 11 million to the environmental Protection Fund (EPF) to improve the stewardship and environmental infrastructure of State recreational lands and facilities and to make necessary improvements and upgrades at environmental education centers and youth camps across the state. (January 25, 2000). The 11 million will be split between the State Office of Parks, recreation and Historic Preservation (OPRHP), which administers the 265,000-acre- State Park system comprised of 158 parks and 35 historic sites, and the DEC, which manages more than 4 million acres of land, maintains thousands of miles and trails and operates 52 campgrounds, six day-use facilities, four education centers, five education camps and 291 water access sites. DEC will also receive \$1.75 million in EPF funds for a number of projects designed to enhance DEC educational facilities, including building and trail improvements, water treatment and electric systems upgrades, and expansion of classroom space at visitor centers. Some of these monies have been earmarked to enhance interpretative trails in Salmon River Area, Oswego County.

B. Real Property Management

There have been some efforts in recent years to explore the development of recreational real estate, namely second or holiday homes. While the SRGC may not be ready to develop such a market, it is a trend that has reached staggering proportions elsewhere, for example in southern Vermont. The owner of Palmiter Realty in Wilmington and Dover (one of the largest operations near ski and golf resorts of southern Vermont), Brian Palmiter, says: “I can’t keep up with the inquiries, and am showing land seven days a week.” In fact, earthworks contractors and house builders are booked up two years in advance in that area. Therefore, the real estate market is vibrant in vacation areas. Accordingly, while it is not possible to project fiscal impacts in this category for the SRGC, this Economic Plan integrates into its Recommendations measures to be used for planning for future real estate development.

In recent years, there have been some modest efforts along the River to develop residential real estate, along the north of the Reservoir at Salmon Shores subdivision, and in the Pulaski area where a group of local businessmen have combined forces in order to promote Pulaski as a viable community in which to live. The Pulaski Executive Development, LLC, purchased 24 acres on which they are building “upscale homes” in an effort to develop and promote the area to families living as far as Syracuse. This venture is seen as a win-win by the developers and is believed will help alleviate problems associated with insufficient tax revenues and inadequate infrastructure development.

The growth of a real estate economy can be one of the strongest income generators through property taxes, service industries and general population growth, with concomitant demands on consumables. The key to such growth is the attractiveness of

an area, and for the SRGC it is the position of this Economic Development Plan that heavy industrial jobs will not create such attractiveness, but rather the River's own resources will be the draw that can aid economic growth.

Accordingly, if the SRGC economy is going to grow as a natural resource and recreation destination, then the management of the open space held by the State and Niagara Mohawk are key triggers to that growth. In addition, re-use of existing buildings offers a partial answer to the growth, since attractive facilities can be developed with minimal capital investment.

For example, and building on the discussion above of lessons learned from Connecticut, Massachusetts and Vermont, the Village of Altmar contains four small buildings, once used as churches, that present excellent opportunities for redevelopment. The Altmar Hotel and Bar/Restaurant are the central facilities for visitors to this Town, which is a jumping-off point for so many fishermen. If the development of an Education and Research Center occurs, this restaurant could not possibly accommodate enough people to satisfy the demand that would be placed on the Village, which would be a focal point for River-related activities.

C. Federal and State Sources

The existing governmental programs that contribute in one form or another to areas such as the SRGC are listed herewith. An analysis of each program is beyond the scope of this report, but the criteria for obtaining assistance from any of these agencies are closely associated with the guidance provided by this Report.

Federal Agency Partners for the SRGC are:

- Environmental Protection Agency – Community-Based Environmental Protection

- National Oceanic and Atmospheric Administration – National Sea Grant College Program
- U.S. Army Corps of Engineers
- U.S. Department of Agriculture - U.S. Forest Service
- U.S. Department of Agriculture - Natural Resources Conservation Service
- U.S. Department of Commerce – National Sea Grant College Program, co-ventured with N.O.A.A.
- U. S. Department of Interior - Bureau of Land Management
- U.S. Department of Interior – National Park Service – Rivers, Trails and Conservation Assistance Program
- U.S. Department of Interior - U.S. Fish and Wildlife Service
- U.S. Department of Interior – U.S. Geological Survey
- U.S. Department of Transportation – Bicycle and Pedestrian Program, Intermodal Surface Transportation Efficiency Act
- U.S. Department of Transportation – Recreational Trails Program
- U.S Department of Transportation – Scenic Byways

State Resources:

- New York Sea Grant Institute – a cooperative program of the State University of New York and Cornell University
- NYS Department of Agriculture and Markets – Grow New York Enterprise Program
- NYS Department of Environmental Conservation
- NYS Department of State
- NYS Department of Transportation – Intermodal Surface Transportation Efficiency Grant
- SUNY System (ESF, Cornell and others)

D. Not-for-profit, Private and Corporate Sources

The momentum for the Greenway Corridor identified in this Study is compatible with Corporate Sponsorships and Private Foundation contributions. The focus to be recommended involves education, research and tourism, founded on the Salmon River's traditional past-times. Accordingly, programs developed can be readily associated with the following list of not-for-profit, private and corporate interests, and this list is only illustrative of the types of interests that could be approached:

The following non-profit organizations have assisted other greenway communities in their conservation projects. Assistance has ranged from hosting conferences, research on local issues and production of publications that further local conservation efforts.

Non-Profit Organizations include:

- American Canoe Association
- American Hiking Society
- American Rivers
- American Trails
- Audubon Society
- Cornell Cooperative Extension
- Ducks Unlimited
- Land Trust Alliance
- League of American Bicyclists
- National Association of Service and Conservation Corps
- National Recreation and Parks Association
- National Trust for Historic Preservation
- National Wildlife Federation
- New York Parks and Conservation Association

- North American Water Trails, Inc.
- Pedestrian and Bicycle Information Center
- Rails to Trails Conservancy
- River Networks
- Seaway Trail, Inc.
- Scenic America
- The Conservation Fund – the American Greenways Program
- The Oswego County Federation of Sportsmen’s Club, incl. Albion Fish and Game Club, NY Bowhunters, NRA, Redfield Rod and Gun Club,
- The Nature Conservancy
- The Trust for Public Land
- Trout Unlimited – Tug Hill-Salmon River Chapter
- Tug Hill Tomorrow Land Trust

Private sources include:

Private Universities and community colleges; research foundations, which are interested in the natural resources or the proposed SRERC.

Corporate Sources include:

- Boys and Girls Clubs of America
- Cabela’s
- Eastman Kodak in partnership with American Greenways
- Niagara Mohawk, a National Grid Company
- Orion Power
- Orvis Company
- Y.M.C.A.

From all research conducted to-date it is noteworthy that successful creation of Greenway Corridors centers on establishing successful Greenway Partnerships. This

approach necessitates working in concert with the many stakeholders in the community and requires considerable effort from volunteers within the community.

Local Highway/Community Organizations:

Amongst the most successful community awareness campaigns throughout the nation has been the “Adopt-a-Highway/Spot/Trail” programs employed by local and County governments. In the NY “Adopt a Highway” programs sponsorship cost the sponsor \$6,500 per mile. With the proposals for trails, and the New York State Byways Program, the SRGC offers many miles of road, trail and many “spots” that could be adopted by corporations and groups. While formal participation in this national program is worth considering an informal adaptation to this concept should be considered. The donations can each be small (which is attractive to most groups), but the linear mileage available is extensive. For example, the Greenway Corridor is about 25 miles long, and has main roads running up and down both sides of the Greenway Corridor. If an “Adopt-a-Salmon River Greenway-Corridor Spot...” sponsorship costs \$100 per month per half mile, then \$96,000 per year can be raised with very little overhead, and a large return in public relations. While this sum is not significant to overall economic development, if returned to promotion of the Greenway Corridor, the benefits in community spirit and heightening public awareness are immeasurable. These community-based programs engender a sense of investment in the area, and each part of the puzzle adds up in the development of a vibrant community.

Furthermore, adopt-a-spot, or in some areas “beautification program” can be organized in conjunction with local student participation and academic credit granted for community service. In many school districts, such projects are coordinated with or through a formalized curriculum centered on reflective learning and volunteerism, or school organizations such as key club or DECA (Distributive Educational Council of America). Such community involvement has many pay offs and helps students develop

ownership and pride in the communities in which they live and in protecting non-renewable resources and are also important components in college admissions.

IV. A DEVELOPMENT STRATEGY

The SRGC Steering Committee, in conjunction with Oswego County, has taken the initiative to look closely at the entire County's resources. In considering the future of the SRGC, conservation of natural resources will be the best safeguard of the local resident's lifestyles. Any strategy developed for economic growth and long-term stability for the towns and villages of the SRGC must be based on the rural and small town character of the population, including their traditional cultural and commercial interests.

Since the economic growth of the Greenway Corridor is premised on the Salmon River's ecology and surrounding habitats, the natural resources must be treated like any valuable resource would be treated in a commercial enterprise. A strategy for protecting the Salmon River ecology can be derived along the same lines as the State's existing wetland and water quality regulations: these laws exist and the scientific implications are well understood. There are also programs in place with both State and Federal agencies that offer additional protection through education and management funding opportunities. New York State maintains an array of natural resource programs that are applicable to the SRGC (Dru Associates, 2001).

The intent of both State and National legislation concerning the protection of natural resources is twofold: identification of resources in need of protection (education and research) and promotion of activities that are compatible with the protection of these resources. The conservation and preservation of natural resources requires that any area susceptible to development pressures must be served by both research and regulation. This report contributes to the research element of environmental management by showing the County how economic growth can be compatible with protection of the Salmon River's geophysical resources and the fishery-based ecosystem. While some of the programs listed above are applied automatically (i.e., wetlands and water quality

regulations), efforts are needed to heighten both agency and public awareness of the River's sensitivity and values.

The strategy of investment in attracting visitors to the region, through a myriad of ways, makes it necessary for the County and municipal leaders to introduce some form of land use management. Where such land use planning is not fully developed in the Greenway Corridor, this Plan must strongly recommend that new programs be developed to employ land use management.

V. RECOMMENDATIONS

The SRGC steering committee is presented here with recommendations that are a blueprint for environmentally sustainable economic growth. In the simplest terms, this Sustainable Economic Development Plan recognizes that the natural resources and fishery of the Salmon River is the lifeblood of the Greenway Corridor, and that permanent economic growth means preserving the River and surrounding landscape, while finding ways to attract the families and friends of the fishermen to the Greenway Corridor, not only during the Salmon migration but throughout the year.

Accordingly, this Plan recommends developing tourism on the basis of the environmental values represented by the river. It is implicit in the definition of “Environmental” that the River’s human residents must be considered an integral part of the “ecosystem,” such that they are enabled to preserve their culture, realize continuing economic growth that is self-sustaining, and conserve the non-renewable resource of clean water to support the fishery. At present, identified existing and potential ecological threats and impacts to the river ecosystem are still manageable. However, due to the fact that the river communities have lagged behind other parts of the State in land management, it will be necessary to play some “catch-up” in order to head off perceived declines in river water quality. It will not be sufficient to merely overstock the River because that will not ensure long-term success of the river’s fishery.

In the SRGC, the alternative to refining land use management (i.e., continuing without new Planning and Regulatory tools) would be degradation of water quality, and eventually a collapse of the fishery. This would translate to economic disaster because the Greenway Corridor has not developed a financial resource base independent of the area’s natural resources: simply put, lose the fishery, and lose the Greenway Corridor’s future.

A. Managing Growth Through Existing Regulations

Any development of natural habitat tends to incrementally contribute to long term “suburbanization” of a region’s ecology. The basis of the “natural resource value” of the Corridor is its woodlands, wetlands, waterways, and its fish and wildlife. These are the attractions of the Corridor, be it for fishing, hunting, hiking, biking or camping. While there is not currently evidence that the SRGC’s development has decreased wildlife resources, there is concern for the composition of the region’s flora and fauna. If ecologically sound regional planning preserves the large, central tracts of forested and wetland habitat as refugia for plants or animals that are disturbance sensitive, then it is possible to prevent the loss of species which are sensitive, and maintain the species richness and diversity of the River ecosystem.

As early as 1985, the New York State Department of Environmental Conservation recognized the threats of human activities to sensitive watercourses in their publication of “Stream Corridor Management: A Basic Reference Manual.” First and foremost in this publication is the acknowledgement that land use activities can impair fisheries, through impacts to both habitat and directly on fish themselves. The technology now exists to eliminate, avoid or manage these problems by suitable planning and mitigation of the impacts associated with almost any human activity. The State’s Environmental Conservation Law provides mechanisms for determining the potential for these problems in the review of development projects, and regulations are in place to protect identified resources. These mechanisms rely on a local “Lead Agency” that is charged with the stewardship of the natural resources within its jurisdiction, and there are State and Federal programs available to assist or govern land use planning.

In order to place that Lead Agency power in local hands, some legislative actions would be required in most of the SRGC. Specifically, while New York State has provided Towns, Villages and Counties with a mechanism for such control, the State

Environmental Quality Review Act, the municipal authorities must have their own legislative framework within which to operate, and that is most often a zoning and land use code. At the very minimum, a process for site plan review would need to be required that considered the protection of groundwater, the location of septic systems, the use of storm-water erosion control measures and the impact of impervious surfaces.

The circumstances in most of the SRGC are problematic for two reasons:

1. Many of the most important zoning and land use regulatory programs are absent (e.g. sanitary code, zoning and land use plans in 4 of the six jurisdictions (see Table below); and
2. With such disparate approaches to development, a comprehensive and consistent economic plan will be difficult to assess quantitatively. For example, an investment firm for developers or businesses would use such issues as the predictability of residential yield or development density in preparing business plans for a particular area. In four of the six Towns within the SRGC, such an exercise would involve too much guesswork to be attractive to new capital investments. Therefore, until the SRGC develops consistent zoning and land use regulation, investors can best be offered guidelines for environmental protection, such as those used in other Greenway Corridors.

Table 3. Land Use Regulation Status March 2003, Salmon River Greenway Corridor

Townships & Villages	Comp. Plan/Land Use Plan		Subdiv. Regs.	Mobile		Junk Yard	Sign Law	Sanitary		Flood Regs.	Other
	Zoning	Use Plan		Home	Park			Code	Unif. Code		
Albion	A	none	A	L	none	L	none	none	LE*	none	none
Orwell	A	none	none	none	L	none	none	none	LE	L	HWI
Redfield	None	none	none	none	none	L	none	none	LE*	none	none
Richland	None	L	A	Z	Z	L	Z	L	LE	L	OS
Altmar	None	none	none	L	none	none	none	none	LE	L	none
Pulaski	None	L	A	L	Z	Z	Z	L	LE	L	none

Legend:

A = Adopted

Z = In Zoning

L = Local Law or Ordinance

LE = Local Enforcement

LE* = Atlantic Inland

OS = Outdoor storage

HWI= Hazardous Waste Inc.

B. A Protection Strategy

A strategy for protecting the intrinsic natural resource values of the Salmon River can involve careful enforcement of the State's existing wetland and water quality regulations. There are also programs in place with both State and Federal agencies that offer additional protection through education and management funding opportunities. Moreover, a resource designated as sensitive under one program may receive more attention under other regulatory programs.

It is the intent of the State's legislation to involve local agencies either directly, or indirectly in the management of regulated natural resources. The State regulations can be combined with, or supplant local site plan review, and offer the local agency both guidance and enforcement in protecting sensitive resources, such as the Salmon River, its tributaries and woodlands surrounding the River. New York State maintains the following natural resource programs that are applicable to the SRGC:

- Freshwater Wetlands Act
- Tidal Wetlands Act
- Protection of Waters (with Stream Encroachment regulation)
- Wild, Scenic and Recreational Rivers Program
- Mined Land Reclamation Program
- Endangered Species Act
- Hunting and Fishing regulation
- Cooperative Forestry and Hunting Programs
- State Pollution Discharge and Elimination Systems regulation, including sanitary, industrial and stormwater regulations.

As an example of the benefits derived from the implementation of such planning tools, consider a program such as the Wild, Scenic and Recreational Rivers Program of New York State. Under this program, there are restrictions on the activities allowed

along a designated Corridor, aimed at protecting water quality and ecological habitat. Thus, if a development is proposed along a WSRR Corridor, the State would contribute directly to regulation and the local authority would have this guidance available during negotiations over the density, configuration and impacts allowable for the project. In the local agency's initial consideration of the project, they would be more inclined to require a complete review under the State's Environmental Quality Review Act (SEQRA). Thus, people interested in developing activities along the River would have guidance from an existing State program, and would also be induced to perform more research themselves into the potential effects of their projects. A brief discussion of the WSRR program is provided in Appendix VI.

The SRGC faces the challenge of trying to maximize sustainable economic growth, while still harboring historical roots that cling to natural resources. The challenge is to combine managed land use development, conservation measures and river ecology in a manner that is not a detriment to the fishery and is in balance with local needs. The challenge for the SRGC is to use a comprehensive planning approach to mitigate negative impacts that may be created by expanded recreational and tourist opportunities on the natural resources and the quality of life for residents.

The SRGC communities should be encouraged to codify the land use information accumulated to-date with a view to establishing uniform guidance for planners and developers as to the appropriate location for new or expanded commercial, recreation and residential activities. The SRGC should be a continuous 25-mile riverfront system of trails, protected open space, revitalized towns and connected development that is designed to enhance river access and recreations and preserve key resources. A useful set of land use management tools has been used in the Schuylkill River Greenway Corridor, in Montgomery County, Pennsylvania, which can be applied to the SRGC.

These include:

- The River Zone: the River Zone includes water quality and habitat, recreational use, dams, dredging of the river pools and preservation of scenic views. The River Zone is recognized as the life –blood of the Greenway.

- The Riparian Zone – Preservation and Enhancement of the Riverbank: The Riparian Zone will promote best management principles in riparian corridors along the river’s edge. These best management principles include erosion control, reintroduction of native plant species and sensitive access to the river.

- The Stewardship Zone – Creating a Local Vision for the Greenway: In river towns, the emphasis in the Stewardship Zone is redevelopment and revitalization of the historic core to enhance local economics.

- The Community Zone – Watershed Communities as Stewards of the Greenway: The community zone empowers the entire municipality to provide a framework for inter-municipal cooperation and planning to create resident awareness about the Greenway, river, and the effect that each resident has on the river’s preservation and enhancement.

In the creation of these zones, the criteria set above (or criteria designed for the SRGC by its decision-makers) should be used to determine which activities are permitted, prohibited or discretionary. As an example, this Plan and the Bio-inventory Study demonstrated that Riverfront zones are so critical to the ecology of the River, that no commercial land uses should be permitted that involve industrial or other activities with the potential to discharge pollution along the River front. As noted in this Plan there is a basis for consensus in terms of the sections of the River that are most suitable for commerce and most sensitive for ecology from information collected during the Workshops held for the SRGC Community Enhancement Plan.

In the dissemination to the public of this Economic Development Plan, it must be pointed out that the designation of these zones, with concomitant derivation of rules for each type of zone, makes it incumbent that local leaders incorporate public consensus into final maps and rules. The residents of the Greenway Corridor should also understand that this zone approach to land use management is far more flexible and economically friendly than classical zoning codes. This approach is also environmentally attractive because large areas known to have special ecological value can be so designated and more readily protected.

C. Economic Development Measures

The economic growth potential for the SRGC has been explored in the body of this Plan. There are many options in selecting economic growth measures, but there is one common theme: the River's natural resources and the Salmon fishery. The management of economic growth in the SRGC must consider:

- Compatibility of the economic growth measures with protection of the basic hydrological and biological resources supporting the River;
- Opportunities for involvement of the local residents in activities that achieve economic growth;
- Realization of the many visions of the Greenway Corridor as a “tourist destination,” and
- A focus on environmental education as an integral element of the Corridor's promotional theme.

These criteria embody the many goals and concepts that have arisen during planning and public input proceedings. While these can be used as a set of simplified goals, this Plan is premised on the set of recommendations to follow.

The SRGC's natural resources may well be their greatest asset, and at a time when Americans are rediscovering their own backyards, the time has come again to reinforce these efforts with a maximal commitment. In order to protect these resources one needs to:

- Maintain GIS map-based inventory of parks, recreational lands and open-space.
- Provide central information service on all lands inventoried
- Promote continued shared informational enhancement

D. Salmon River Greenway Committee: Future Promotional Initiatives

In visits to the SRGC, it was extremely difficult to gather the information required by a visitor from any single source. Therefore, it is the recommendation of this Plan that the Salmon River Greenway Committee expands its promotional efforts. There is a strong continued purpose and need for an inter-jurisdictional organization, such as the Committee, to continue to draw together representatives of all of the local groups, including, but not limited to:

*Chambers of Commerce to include:

Pulaski/Eastern Shore Chamber of Commerce

Altmar/Albion Business Association

Tug Hill Business Association

*Cooperative Tug Hill Council

*Cornell Cooperative Extension of Oswego County

- *District legislators
- *Elected officials from Towns and Villages
- *Independent business owners
- *Lodges/clubs
- *New York Sea Grant
- *New York State (DEC, OPRHP)
- * NM-Holdings Corp., a subsidiary of National Grid
- *Oswego County (Depts. of Planning & Community Development, Promotion & Tourism, Soil and Water Conservation)
- *Orion Hydro
- *Private developers
- *Salmon River Council of Governments
- *The towns of Albion, Orwell, Redfield and Richland & the villages of Altmar and Pulaski
- *The Tug Hill Commission
- *Tug Hill Tomorrow

The dual function of the Committee could be enhanced by a campaign to promote the Greenway Corridor as a destination and to promote the Stewardship Zone. The Committee should continue with a role of educating the community about the issues identified in this Economic Development Plan, liaising between County Planning and the local residents, with the ultimate goal of bringing about a Stewardship Zone framework. On a parallel track the Committee should assist in the development of centers in each Town and Village where information is available to visitors, preferably distributed by local volunteers (i.e., the Salmon River Rangers). In the long range, the Committee should continue working with the County to improve tourist marketing.

This Plan has identified many activities, liaisons and independent parties involved in managing parks and open space in the SRGC. While the County staff at the Youth

Bureau and independent entities continue to make progress in promoting the recreational use and open space preservation efforts, the scope of the potential is greater than can be managed and developed by the existing infrastructure. Consequently, the Salmon River Greenway Committee should examine ways in which assistance can be offered in meeting these needs.

Furthermore, the decision makers in the Salmon River Greenway should:

1. Continue to develop cultural attractions that capture a significant portion of the emerging tourist market.

- Support the development and growth of cultural attractions in the villages and towns of the SRGC
- Cluster multiple cultural attractions in downtown Pulaski
- Encourage coordinated marketing and programming for cultural attractions.

2. Continue to develop services that capture a significant portion of the emerging tourist market.

- Ensure that overnight accommodations are environmentally and aesthetically compatible with their surroundings
- Specialty food markets and sit-down restaurants (with outdoor dining) that provide tourists with options for lunch and dinner
- Family-oriented shops and restaurants that cater to families.
- Antique, crafts and art galleries, that appeal to “cultural tourists.”
- Develop service sector lacking in particular Towns or Villages.

3. Continue to develop a diverse economic base by promoting diversified recreational facilities.

- Implement the development of walking trails and biking trails all of which can be used by both residents and tourists
- Ensure that parks and recreational facilities can be easily found and accessed by out-of-town visitors
- Provide essential visitor amenities near the entrances of parks and recreational sites.

However, it is important to remember that all times that recreational trails and other facilities should be designed to give residents and visitors access to the public land while protecting valuable features such as wetlands, forests and upland woods.

4. Continue to balance development pursuits with conservation policies with respect to historic, scenic and natural resources.

- Explore feasibility of developing Agritourism
- Explore the feasibility of developing Ecotourism
- Explore the feasibility of developing Flea Markets
- Explore the feasibility of developing Environmental Education
- Explore the feasibility of developing Adaptive Reuse of existing buildings

5. Develop a coordinated theme for tourism signage, and post signs.

- Creation of a “theme” for the SRGC
- Signs should convey a coordinated “SRGC” theme, with images words, colors and lettering that reflect those characteristics that contribute to the SRGC identify (e.g., the river, the hatchery).
- Unified theme to convey the message that SRGC has a variety of attractions that can be enjoyed over the course of a visit.
- Roadside signage to assist visitors to their destinations.

- Signs in downtown and the village and hamlet centers could be more elaborate, providing a directory of local shop, restaurants, and attractions, as well as transit information, and descriptions of historical sites and natural features

VI. CONCLUSION

The research conducted for this Plan repeatedly demonstrated that the intrinsic value of the natural resources of the SRGC is susceptible to the potential impacts of development. The best insurance against the loss of these values is a proactive stance on land use management, rather than a reactive approach, because once the River's resources are degraded, it may not be possible to recover the same values that are now enjoyed by the people of the Corridor. Towards this end, the State is pursuing open space preservation in an aggressive way.

From Governor Pataki's June 2002 announcement of the enormous land acquisition in the Tug Hill Plateau, it is clear that the State values the natural resource that comprises the headwaters of the Salmon River. Accordingly, the nature and extent of further State involvement in land acquisitions along the River is a critical step in completing the protection of the area's natural resources, and is also a clear indicator that the State sees both economic and ecological opportunity in this region. In specific reference to the natural resource values of the Tug Hill, Governor Pataki said: "Not only will the land be protected for future generations, but the majority of it will continue to be a working forest, providing jobs, and it will become a prime recreation area; everybody wins." The same philosophy can be applied to the Salmon River, except that the working forest is blended with a working fishery.

BIBLIOGRAPHY

- Architectural Resources, 2002. "Salmon River Greenway Corridor Community Enhancement Project: Visual Stimulation Analysis." Buffalo, NY. 25pp. Prepared for the Oswego County Department of Planning and Community Development
- Bielen, M, G. Kreag, D. Kuehn, N. Riggs and D. Ververs "Scenic Byways, Trails, and Corridors and Their Impacts." A fact sheet produced by the Great Lakes Sea Grant Network, coastal Land Use Committee.
- Brown, T.L., C. Dawson, N.A. Connelly, and P.H. Harrington, 1990. "Oswego-Eastern Shore Communities Tourism Development Action Plan." Seaway Trail, Inc.: Sackets Harbor, NY. 31 pp.
- Caddick, J.J. 2000 "Salmon River Greenway Signage Plan: Report and Recommendations." Compiled for NYS Tug Hill Commission and Salmon River Greenway Committee, Oswego County, NY 30 pp.
- Connelly, N.A., D. Kuehn, T. Brown, and B.A. Knuth, 1999. "1996 Angler Effort and Expenditures on New York's Great Lakes Waters." NY Sea Grant, SUNY Oswego, and Cornell University Department of Natural Resources: Ithaca, NY. 8pp.
- Dawson, C.P. 1994 "Salmon River Corridor Greenway Protection and Development Concept Plan." Vista Consulting: Mexico, NY. 29 pp. Prepared for Cooperative Tug Hill Council and Salmon River Corridor Coordinating Committee
- Dunn, K.L. 2002 "Growing: A great Experience for You." Journey magazine and directory to New York State's Seaway Trail. Seaway Trail, Inc.: Sackets Harbor, NY. Pp. 20-22.
- Dunn, K.L. 1997. "Seaway Trail agri-touring: our diversity is delicious." Journey magazine and directory to New York State's Seaway Trail. Seaway Trail, Inc.: Sackets Harbor, NY. Pp. 68-71, 74-75.
- East Coast Four Wheel Drive Association, Inc. 1999. "Assessment of Four Wheel Drive Recreation in the Midwest/Northeast." 38 PP.
- Environmental Affairs "Salmon River Corridor Divestiture Plan." Prepared for NM

Properties Inc.

- Eberts, P., and D. Ververs, et al'. 2000. "Commercial Services and Public, Professional, Financial, Business Services in Economic Development of Oswego County Communities." Cornell University: Ithaca, NY 37 pp.
- Environmental Affairs "Salmon River Corridor Divestiture Plan." Prepared for NM Properties Inc.
- Grudens-Shuck, N., and J. Green. 1991. "Farming alternatives: a guide to evaluating the feasibility of new farm based enterprises." Farming Alternatives Program, Cornell University: Ithaca, NY 88pp.
- Grudens, K. 1992. "Greenway Planning Study for Pulaski, New York." SUNY College of Environmental Science and Forestry, Syracuse, NY 51 pp.
- Hilchey, D., and D. Kuehn. 2001 "Agritourism in New York: A Market Analysis." NY Sea Grant, SUNY, Oswego: Oswego, NY and Farming Alternatives Program, Cornell University: Ithaca, NY 8 pp.
- Hilchey, D. 1995. Farmer's markets and rural economic development, entrepreneurship, business incubation, and job creation in the Northeast. Farming Alternatives Program, Cornell University: Ithaca, NY 12 pp.
- Hilchey, D. 1993. Agritourism in New York State. Farming Alternatives Program, Cornell University: Ithaca, NY. 102 pp.
- Kuehn, D., D. Hilchey, D. Ververs, K.L. Dunn, and P. Lehman. 1998. "Considerations for Agritourism Development." NY Sea Grant, SUNY Oswego: Oswego, NY. 25 pp.
- Kuehn, D., and D. Hilchey. 2001. "Agritourism in New York: Management and Operations." NY Sea Grant, SUNY Oswego: Oswego, NY., and Farming Alternatives Program, Cornell University: Ithaca, NY. 8 pp.
- Macher, R. 1997. "More than a farm." Journey magazine and directory to New York State's Seaway Trail. Seaway Trail, Inc.: Sackets Harbor, NY. P.74.
- Newman, C. 2002. "Exploring the Seaway Trail! "New York State's only National

- Scenic Byway.” *Journey magazine and directory to New York State’s Seaway Trail*. Seaway Trail, Inc.: Sackets Harbor, NY. Pp.5-7
- Niagara Mohawk Power Corporation Land Management and Development Department. 1992 “*A Comprehensive Land Management Program for the Salmon River Properties.*” Syracuse, NY
- Nutter Associates and S. D. Reiling. 1999. “*Oswego County Snowmobile Trail Feasibility Study.*” Oswego County Department of Planning and Community Development, Oswego County, NY. 57 pp.
- N.Y.State Urban Council & the Downtown Committee of Syracuse, Inc. 2001 “*Pulaski: A downtown revitalization strategy.*” Downtown Idea Exchange: Syracuse, NY. 25 pp.
- Oswego County 1997. ”*Oswego County Comprehensive Plan.*” Pdf produced by Oswego County Public Information Office, Oswego, NY
- Oswego County Department of Promotion and Tourism. 2001. “*Fishing and Hunting in Oswego County: A guide to sport fishing and hunting.*” Oswego, NY 22 pp.
- Oswego County Department of Promotion and Tourism. 2001. “*Oswego County:1000 Islands-Seaway Region.*” Oswego, NY 27 pp.
- Salmon River Greenway Committee. 1995 “*Salmon River Corridor 1995 Citizens Survey Results.*” Oswego County Cooperative Extension: Mexico, NY.
- Salmon River Greenway Committee. 1995 “*Salmon River Citizens Survey.*” Oswego County Cooperative Extension: Mexico, NY.
- SeaWay Trail Inc., 2002-2003 “*Journey Along the New York State Seaway Trail.*” Wilcox Press, Inc. Ithaca, NY 14th Edition 77pp.
- Structure Guides 2000 “*Salmon River Pulaski, NY.*” Aerial Photo Guide. Printing Service Inc., Towson, MD.
- The Business Council of New York State, Inc. 2000 “*Greenways & Trails Bringing economic benefits to New York.*” New York Parks & Conservation Association, Albany, NY. 8 pp.
- Working document; Compilation of Community Goals Salmon River Corridor.
Websites:

<http://ny.usgs.gov/projects/news/frostvalleycoop.html>
<http://utopia.uoregon.edu/projects/landuse/goal15.html>
<http://www.dec.state.ny.us/website/education/edcamps.html>
http://www.state.my.us/governor/press/reay00/jan25_2_00.htm
www.agmkt.state.ny.us
www.AmericanTrail.org
www.americantrails.org/resources/greenways/SchuylGrnwy.html
www.wsboces.org/instructionsupport/outdoor.cfm
www.ccc.cornell.edu/seagrant/tourism/agritou.html
www.ci.morganton.nc.us
www.CNYFall.com
www.conservationfund.org
www.co.oswego.ny.us/tourism/index.html
www.fmr.org/dakgrnwy.html
www.english.upenn.edu/~afilreis/fv-history.html
www.frostvalley.org
www.geologyandgeography.vassar.edu/fallkill/greenway.html
www.grandforksgov.com
www.hudsongreenway.state.ny.us/
www.littletennessee.org
www.nashville.gov/parks/news43.html
www.neo.Irun.com
www.nps.gov/ncrc/programs.html
www.nybyways.com/big-map.htm
www.ohiorivergreenway.org
www.oswegocountybusiness.com/issue62/62RelatedStory.html
www.providenceplan.org
www.salmon-river.com
www.seagrant.sunsb.edu/Pages/DuneHabPRO31501.html
www.seagrant.sunsb.edu/Pages/stratplan-issues.htm
www.SeawayTrail.com
www.schuylkillriver.org
www.silverbay.org
www.susquehannagreenway.org
www.tpl.org/tier3
www.tughillregion.com
www.wattfarms.com/wattfruit.html
www.ymcanyc.org/camps/conference.html
<http://www.ymcanyc.org/camps/enved.html>

Appendix I: Ospreys (*Pandion haliaetus*)

Ospreys feed on fish, so they need to nest in the vicinity of water. The natural nesting sites for ospreys are large dead trees, but with fewer and fewer of these trees, Ospreys have taken advantage of man-made structures and commonly nest at the tops of utility poles. Ospreys will commonly use the same nest site year after year.

Once in serious decline due to DDT-induced shell thinning, the osprey is making a comeback in New York. In 1983, the osprey was down graded to "Threatened" from its 1976 listing as "Endangered," and in 1999 it was down graded from "Threatened" to "Special Concern." Ospreys are not federally listed, but are currently protected under the Migratory Bird Treaty Act. Interestingly, the NYSDEC does not include Oswego County in its map of the breeding range of ospreys in New York, so this nest may have some significance on the State level

Appendix II: Myers Hill Drumlin

The SRGC also contains a number of striking and rare geological features, such as the Myers Hill drumlin.

A drumlin is an elliptical-shaped deposit of glacial till with its longer axis parallel to the direction of ice flow. The average size of a drumlin is 1 to 2 km in length and 400 to 600 m in width. They may be anywhere from 5 to 50 m high, however the length-width ratio tends to remain at 2 to 3.5 in most circumstances. Drumlins remain an uncertainty in glacial geomorphology, as no satisfactory explanation to their mode of origin exists. Each theory possesses evidence supporting it, as well as information to disprove it. Until an absolute conclusion is produced, glacial geomorphologists will continue to contemplate the origin of the controversial drumlin.

With regard to spacing and orientation, drumlins normally do not occur as individual formations, but as fields of many drumlins grouped together. These drumlin fields occur

only in a small number of formerly ice-covered areas. One of the largest and best-known drumlin fields is in northwestern New York, where there are approximately 10,000.

Appendix III: The Seaway Trail

The SRGC is fortunate to be directly accessible, on the western end, from the Seaway Trail. This system is part of a national program to promote the link between history, local culture and tourism. The program provides sources of funding and national promotion for local areas trying to develop tourism, and especially outdoor recreation-related activities.

The 504-mile Seaway Trail is a federally designated “America’s Byway” noted for “great American road trips” and is the longest National Recreational Trail. New York’s 454-mile portion of the trail is New York State’s only nationally designated scenic byway. The Seaway Trail parallels Lake Erie, the Niagara River, Lake Ontario and the St. Lawrence River connecting with 50 miles of byway along Pennsylvania’s Lake Erie coast, providing a unique alternative to the interstate and toll roads. This voluntary not-for-profit byways program is managed by grassroots organizations and is a mechanism by which the best of communities can be shared with visitors. Participation in the program is through nominations from local communities and agencies and inclusion is based on the byways unique characteristics and intrinsic qualities. As Rob Draper, Program Director for the National Scenic Byways Program, states: “Highways are for getting from points A to B. Byways are for learning what’s special between points A and B. People are intrigued by a byway’s story.” Draper continues, “...visitors should feel warm and welcome on byways. They should immediately sense the pride and love people have for the byway, the resources, the story.” The purpose of the establishment of such a trail is to tie destinations together, so that the journey becomes a destination in its own right.

Seaway Trail, Inc., (non-for-profit private sector corporation that focuses on byway management, administration, and promotion) and the Seaway Trail Foundation, Inc., (not-for-profit private sector corporation that focuses on education and fundraising) presently function in partnership with five key agencies and organizations providing support for their mission to market New York's coastal area. These include the NY State Department of Transportation who have erected directional signage and signage for sites connected to the War of 1812, the State University of New York at Oswego who have built and maintained information kiosks along the trail, the National Park Service, who has designated the Seaway Trail as a National Recreation Trail, the NYS Office of Parks, Recreation and Historic Preservation who own and maintain the state of the art interactive Seaway Trail Discovery Center and the American Automobile Association, a strong participator and promoter of the trail. Additional partners include CCE of Oswego County and Sea Grant NY, part of the National Oceanic and Atmospheric Administration (NOAA), U.S. Dept. of Commerce.

The Seaway Trail aims to simplify travel routes for visitors and to assist communities in directing visitors to important attractions and areas. The trail hopes to benefit communities by increasing the real property value of lands adjacent to them, by multiplying visitor expenditures, and by providing a mechanism for educating not only visitors but also residents about the resources and attractions found along them. The Seaway Trail presently receives approximately 20,000 visitor inquiries for information a year, and the trail itself is believed to have a tremendous impact on the area it covers (Scenic Byways, Trails, and Corridors and their Impacts – A fact sheet produced by the Great Lakes Sea Grant Network, Coastal Land Use Committee).

Appendix IV: Recreational Resources

In addition to the recreational opportunities discussed above in the descriptions of the Greenway Corridor communities, a number of festivals and special events are held on an annual basis throughout the Greenway Corridor. These include:

- a. Big East Snowcross Tour (February, Pulaski);
- b. Light-Up Pulaski (December, North and South Parks, Pulaski)
- c. Pulaski's Summerfest (Summer-long, Pulaski)
- d. Sandy Pond Sportsmen's Club Ice Fishing Derby (February, Pulaski)
- e. Salmon River Festival (September, Pulaski)
- f. Strawberry Festival (June, Albion)

Recreational activities within these municipalities depend not only on the natural resources in the municipalities but are also driven by seasonal use. The Village of Pulaski experiences the greatest visitor use during the summer and autumn fishing seasons. Winter visitors on the other hand are attracted to the Town of Redfield because of the vast amounts of snow. Each municipality represents unique attractions and needs to build on the special qualities of their own area in order to avoid competition with other areas and improve existing strengths and opportunities. Collectively, the SRGC can provide activities for a wide variety of tastes, with the challenge being the attraction of visitors to the area.

In the following section the many activities available to visitors are described, all of which are complements to development of the Greenway Corridor as a prime recreational destination.

- New York State Public Lands- The SRGC contains numbers of State Parks, recreations areas and open spaces. Selkirk Shores State Park is a 980-acre park in the

town of Richland on Lake Ontario. Recreation includes fishing, a swimming beach and accommodations include cabins and camping. Other state lands include various fishing access points along the Salmon River and Lake Ontario tributaries and the 110 foot Salmon River Falls Overlook, Orwell.

- Fishing – NYS DEC has purchased fishing easements along the Salmon River running from the upper boundary of the Douglaston Salmon Run, upriver to the marked boundary below Lighthouse Hill Reservoir. Fishing access areas are designated with yellow DEC “Public Fishing” signs. Some established fishing spots include:

- The Estuary: A large marshy Stillwater. Can be fished by boat launched at Pine Grove in Selkirk Shores State Park or at Lighthouse Marina. Fishing access site at State Rte. 3 bridge

- Douglaston Salmon Run: Private fee-access area, limited to 375 anglers daily, stretches 2 1/2 miles from the estuary to the Village of Pulaski. Pools include Lower Clay Hole, Meadow Run, Clay Hole, Joss’s Hole, and the Little Black Hole. Permits are sold at the parking area on County Rte. 5 (Lake Street) north of the river

- Black Hole: A long deep hole at a bend in the river, west of Pulaski with access from the north bank.

- Long Bridge or Staircase Pool: Upriver, near the center of Pulaski, a steep south bank prevents safe access (except from the north) via a parking area on Forest Drive near the end of James Street.

- The Short Bridge or Town Pool: Just below the U.S. Rte. 11 bridge in Pulaski.

- Dunbar Field or Ball Field Pool: Section of pools and riffes behind Deaton’s Hardware adjacent to the railroad crossing on State Rte 13. Park streamside on the south bank

- John Ben Snow Community Complex (formerly the Haldane Center): Upriver, with north bank access. Park near the complex off Maple Avenue

- 1-81 Pool: Access this pool along the north bank near the Snow Community Complex or from the south bank via the parking area behind Tony’s Salmon Country Sport Shop on State Rte. 13.

- Railroad Bridge, Paper Mill Pool: East of Pulaski on County Rte. 2A. Park roadside near the railroad crossing. Follow path to railroad trestle. Paper Mill Pool is upriver and the Railroad Pool downriver of the trestle.

- Compactor Pool: Access this pool. Located just below the County Rte. 2, A bridge, from the paved, public parking area near the solid waste transfer station.

- Sportsman's Pool: Upriver a half mile, public parking areas on State Rte. 13 to the south, and Centerville road to the north

- Trestle Pool: just downriver from the mouth of Orwell Creek. Access this pool from the parking areas on State Rte. 13 on the south, or an access road leading from Sheepskin Road on the north.

- Ellis Cove: Downriver from Altmar on County Rte. 52, a paved public parking area provides streamside access.

- Schoolhouse Pool: Downriver from the village of Altmar, access this pool from the public parking area, just north of County Rte. 52 bridge. Launch ramp for kayaks and drift boats on the south bank, just above the bridge as well as a parking lot.

Catch and release fly fishing sections are designated at a lower fly fishing section beginning at Country Rte 52 bridge in Altmar and extending to a marked boundary at Beaverdam Brook (open September 15th to May 1st) and upper fly fishing section which begins just above the Salmon River Fish Hatchery on Country route 22 and continues to a marked boundary at the Lower Reservoir (open April 1st through November 30th). Additional fishing is permitted in the Lower Reservoir, stocked with rainbow trout (accessed via Bennett's Bridge at intersection of Country Rtes 22 and 30) and the Upper Reservoir, popular for pan fish, largemouth and smallmouth bass and ice fishing (several access spots along the shore).

- Boating :

Major boats: Public gravel ramp at Selkirk Shores State Park as well as private launches and dockage. These include:

Carnsies' Irish Wigwam Resort LLC (60 slips, 35' boat max.)

Clark's Marina (30 slips, 20' boat max.)

Lighthouse Marina (30 slips, 40' boat max.)

Marina Jones

North Sandy Pond Marina (100 slips, 32' boat max.)

Pine Grove Boat Launch

Wild Bill's Lodge & Charters (12 slips, 40' boat max.)

Drift boats: North of County Rte. 52 bridge is a public parking area. On the south bank of the river, just above the bridge is a launch ramp for drift boats (Schoolhouse Pool) or drift boats can be launched from Compactor Pool and Trestle Pool access.

Kayaking/canoeing: Kayaks can also be launched from the drift boat access point at Schoolhouse Pool, Compactor Pool and Trestle Pool. The one-mile Lower Salmon River Reservoir is perfect for beginner canoeists and kayakers and those wishing to take it slow. Launching is from the day-use picnic area across from Bennetts Bridge Hydropower Facility on county Route 22. The six (6) mile Upper Reservoir provides easy access to many streams and islands via the three launch site at the end of Jackson Road or C.C.C. Drive Off County Route 22 on the northern shore of the reservoir, or from the reservoir access 0.7 miles south of Redfield at the intersection of County routes 17 and 27. The Salmon River is one of the best white water kayaking rivers in Upstate New York. Regulated flow increases are conducted five weekends a year. These flow weekends are usually:

Forth weekend in June

Second and fourth weekends in July

Second weekend in August

First weekend in September.

During these weekends hundred of kayakers and canoeists are attracted

Biking:- The Salmon River Falls loop is a bike trail that has been developed off the Salmon River Trail. Details of this trail are found in the guidebook "Salmon River! A Guide to the Attractions of the Salmon River Greenway" (Oswego Co., Dept Promotion and Tourism)

The Tour de Tug Bicycle Touring Route includes a 110-mile course, an 80-mile intermediate road loop, a 34-mile novice race and a 30-mile ride for mountain bikes. A portion of this tour overlaps with a designated trail off the Seaway Trail, and includes the western edge of the Tug Hill Plateau and the SRGC.

In the Bicycle Master Plan for the Adirondack North Country Region of New York State it is noted that the SRGC is an area where “bicycling opportunities should improve along the greenway... and that...there appear to be opportunities for promoting the same (snowmobiling) trails for bicycling in the summer season. Further noted is the limited number of bicycle shops in the County, and the SRGC in particular is noted in this study as being a small business opportunity worth pursuing.

- Bird watching – A wide array of birds use the Greenway Corridor, with many scavengers and raptors. There is an active Osprey nest on a power pole along the southern shore of the lower Salmon River, as well as bald eagles in the SRGC. Bird watching generated \$219 million to NY State in 1991 (Sea Grant, 2000-2005).

- Hiking-Numerous trails exist in the greenway including the Selkirk Shores State Park.

- Hunting – Deer and turkey hunting at Douglaston Salmon Run, Pulaski, and deer and small game (snowshoe rabbits, grouse and woodcock) at Geronimo Sports Lodge, located at the headwaters of the Salmon River in Redfield. Numerous hunting guide services are found in the SRGC.

- Cross Country Skiing - The Tug Hill region because of its location near Lake Ontario receives well above average “lake effect” snowfall (200 to 300 inches).

- Snowshoeing

- Snowmobiling – Northern Oswego County’s Tug Hill region is the ultimate winter playground and receives “more snowfall than anywhere east of the Rocky mountains” (I Love NY- Oswego County). Trail systems stretch from Selkirk Shores State Park to Redfield and link up with the trail systems of the Tug Hill Region and the Adirondack Park. Snowmobiles are available for rent and purchase in Pulaski. In 1998, Oswego County commissioned the Oswego County Snowmobile Trail Feasibility Study which

estimated the economic benefits of snowmobile activities, assessed existing snowmobile trail issues, and made recommendations for improvements in the County's snowmobiling system. The purpose of the study was to assist the County in determining the feasibility of creating a snowmobile trail system that could become a tourism destination, as a stimulus for economic development. An impetus for this study were the issues surrounding the stability and permanence of the trail systems which were privately owned and questionable in terms of long-term use. Results of the study estimate that snowmobile activity generated \$20.5 million in direct and indirect economic benefits to the County during the 1998-99 season. The study specifically recommended that:

a) the County, together with snowmobile clubs and landowners should develop a program that would move from a "gentleman's handshake" system of trails to a system of formalized trails based on written agreements, and, where appropriate, easements for the portions of lands actually used for snowmobile trails;

b) Additional funds should be provided for trail maintenance, to narrow the gap between cost and reimbursement to the clubs, and to provide funds (either County or State) for the maintenance of additional newly developed miles of trail; and

c) The County should create an Oswego County Snowmobile Trail Development Fund to help reimburse snowmobile clubs, the county or town highway departments for projects related to trail improvement and development

d) should establish an Oswego County Snowmobiling Commission drawing together representatives

e) under the auspices of the Department of Planning and Community Development, the County should formalize its long-time leadership in trail and trailhead planning by including snowmobiling as an explicit component of OCCP.

- Camping – New York State and a private interest offer one of the largest Lake front recreational and camping complexes in the region at Port Ontario. In fact, the services offered in Port Ontario are quite modest, while the numbers of people summering nearby is very large (as many as 6,000 at peak in summer). There are also

limited camping opportunities near the Salmon River Reservoir, but this niche of the State's land use management is under-utilized in the Greenway Corridor.

There are some private sites for camping, and these appear to serve the fishing visitors almost exclusively. Private campgrounds include:

- Pulaski and vicinity

Bear's Sleepy Hollow RV Park (Open April to October)

Brennan Beach (Open May to October)

Chedmardo Campsite (Open May to October)

Colonial Court Campground (Open April to November)

Rainbow Shores Campsite and Motel (Open may to October)

Stoney's Pineville Campgrounds (Open year-round)

Sunset Campground (Open April to November)

Trapper's Place Inc. (Tents only, open year-round) in Pulaski

- Altmar

Brenda's Motel and Campground (Open April to October)

Brown's Campground (open July to November)

Cannon's Campground (Open year-round)

One public campground facility is located near Pulaski, the Selkirk Shores State Park (Open May to October), has both RV facilities and tent sites, as well as cabins.

Other SRGC activities include:

The Pines Golf Course, Pulaski- 18 hole Private-open to public golf course.

The Starlight Driving Range situated on U.S. Rte. 11, Pulaski

Tri-R Karts and Super Golf, NYS Route 3, Pulaski, offers miniature golf and go-carts.

Appendix V: Environmental and Educational Camps

Herewith is the background to what such Camps can offer and how they are operated.

NYS DEC Environmental Education Camps

For more than 50 years, The State Department of Environmental Conservation (DEC) has provided weeklong residential camp programs in conservation education for young New Yorkers (Map X). These DEC camps offer youth the opportunity to become immersed in conservation with activities that teach the wise use of natural resources. The DEC camp program consists of a variety of workshops and activities designed to assist the campers in becoming more aware of their environment and to also stimulate their desire to foster life-long environmental stewardship. These workshops and activities, which focus on learning and recreation, are conducted outdoors providing the camper with direct and diversified hands on experiences. Workshops focus on subjects such as group dynamics, principles of ecology, fresh water communities, field communities, forest communities and human communities.

Three camps serve the 12-14 year-old population:

- **Camp Colby:** adjoins the 100-acre Adirondack Forest Preserve and including Lake Colby in the northern Adirondacks, Franklin County
- **Camp DeBruce:** located adjacent to the 300,000-acre Catskill Forest Preserve in the southern Catskills, Livingston Manor, Sullivan County
- **Camp Rushford:** located adjacent to the 4,500-acre Hanging Bog Wildlife Management Area in Genesee Valley in Allegany County, serve the 12-14 year old population.

In 1998, a new 2,500-acre camp was established at Pack Forest located north of Warrensburg in the southern Adirondacks, recognizing the need for weeklong ecology

workshop for teens 15-17 years old. The Pack Forest Camp includes an 85-acre lake and many streams and wetlands.

Each of these DEC camps has been found to have different origins and environmental foci.

- *Camp DeBruce* has been in operation since 1948. Formerly a private estate and fish hatchery, DeBruce was acquired by the DEC in the 1940's and converted into a conservation education camp for boys. In 1975 Camp DeBruce began operations as a co-educational facility. Camp DeBruce is within walking distance to natural forest, trout streams, the Catskill Fish Hatchery and Mongaup Pond State Public Campsite.
- *Camp Colby*, formerly a private estate, was purchased by NY State in 1961 from William Morris of the William Morris theatrical agency. During Morris' ownership, it was known as Camp Intermission because theatrical clients were invited to the camp for rest and relaxation on Lake Colby and to get away from New York City's hectic life. Many local residents still refer to Colby as Camp Intermission. Colby opened as a boy's conservation camp in 1963 replacing the Ray Brook Camp founded in 1950. In 1971, Colby became DEC's first co-educational facility.
- *Camp Rushford* is the only DEC camp specifically designed and built as a conservation education camp. The two main buildings are constructed of logs salvaged from the Adirondacks after the blow down of 1950. Rushford, originally a boy's camp (1952) became co-educational in 1983. Rushford offers unlimited space for outdoor learning amid hardwood forests, conifer plantations, fields, streams and marshes. Campers also have the additional opportunity to explore the bog after which the area is named.

- *Pack Forest* is the newest of the DEC camps opening in 1998 and offering a high school level environmental studies program. Pack Forest affords adolescents the opportunity to explore forestry, aquatic biology, wildlife-management, field ecology and many other environmental issues. Students are furthermore exposed to professional forestry techniques and are encouraged to participate in optional activities such as fly-fishing, canoeing, hiking, swimming, shooting sports and orienteering. The camp includes an 85-acre lake and numerous miles of trails. Campers at Pack Forest reside in small cabins housing approximately 15-20 campers. Pack Forest was named after Charles Lathrop Pack, an Adirondack landowner who donated the land to the State University of the New York College of Environmental Science and Forestry to be used for research and training in the field of environmental studies. DEC are currently using the property in an agreement made with the college.

The camps operate 5-8 weeks during the months of July-August and all campers are encouraged to return the following year for the Returnee Week, offered only to campers who have already enjoyed the camp program. DEC camps cost \$225 per week, and local conservation and community groups sponsor many campers. These DEC camps are limited by their short duration of open time and the fact that most camps are functioning at full capacity.

Frost Valley YMCA Family and Conference Center

Today the Frost Valley YMCA Family and Conference Center, accommodates more than 30,000 guests annually. Many of the guests are repeat visitors returning year after year. Frost Valley YMCA is located on 6,000 acres of forestland, encompassing the two branches of the Neversink River. Frost Valley is situated 110 miles northwest of New York City on the prior Julius Frostman estate in the heart of the Catskill Mountains and is surrounded by 240,000 acres of “forever wild” Catskill Forest Preserve (Map X). Frost Valley considers itself not only a conference center but also an environmental

education, camping and cross-country ski facility. In winter, the center is open daily for cross-country skiing and environmental education and on week-ends for cross country skiing plus a variety of recreational activities including tubing, tobogganing, ice-skating, ice fishing, arts and crafts, ecology walks and talks, games, wellness activities and more. Scenic mountains, forests, streams and waterfalls complement the extensive (35 groomed and 10 ungroomed) trail system for all levels of skiers. Frost Valley prides itself on “great food and lodging, outstanding meeting facilities and, most importantly, unique opportunities to learn and grow in spirit, mind and body” (Colin Campbell, Director).

The Frost Valley Summer Camp tradition began 100 years ago when a small group of boys camped at Lake Wawayanda in New Jersey under the banner of the YMCA. Throughout the years of transition this practice has now grown into what is the Frost Valley YMCA providing resident camp sessions for campers age 7-15. These on-site camps are designed to provide campers with many options and many are quite specialized. They include:

One-for-One (ages 7-13) is a five (5) day introduction to resident camping and is designed to meet the special needs of first year campers.

Four twelve-day camps include:

- *Ranch Camp* (ages 9-15) will put you in a western saddle is a program dedicated to young riders,
- *Arts Camp* (ages 9-15) or *Iscusfa*, focuses on dance, drama, and studio art class aimed at challenging and guiding creative energies and
- *Woodwise* (ages 10-13), a concentrated program of nature study and camp craft with special emphasis on global environmental issues.
- *Pioneer Village* (ages 11-14) is an Educational Farm program aimed at fostering meaningful connections for participants with the traditions and the bounties of our agrarian past by involving them in hands on exploration of agricultural practices and rural life styles. Pioneer Village is located along

the east branch of the Neversink River, in the Denning Valley, thirteen (13) miles from the main Frost Valley facility. This early 20th century homestead includes 590 acres; 30 acres are devoted to pasture, 40 acres to hay fields, and 2 acres to an organic garden. Livestock include chickens, turkeys, goats, sheep, cats, pigs, dogs and a cow. Each session hosts nine youths accommodated in two yurts, i.e., traditional Mongolian dwellings. Participants live and work together at the farm and programming focuses on farm lessons, environmental lessons, folk-life lessons and pioneers crafts and recreational activities.

The Teen Leadership Program, otherwise known as Phoenix (returning campers age 15) is a four (4) week continuous leadership program. During summer when camp is in session, the kitchen serves 800 people a total of approximately 2,4000 meals daily

In addition to the above-mentioned camps, Frost Valley also offers *Special Programs for Special Needs* (ages 10-20). These programs include *Mainstreaming at Camp* (MAC) and the *Dialysis Camper* program to children on dialysis or 6 months post transplant. The camp is fully equipped with 5 hemodialysis machines an appropriate environment for treatments.

As an alternative to the on-site camping program, Frost Valley also hosts the *Frost Valley Adventure Program*, a program aimed at developing life-long attitudes, skills and knowledge to further understanding and appreciation of self-worth the role of individuals in communities and the world in which we live. Frost Valley offers over 25 one, two and three week trips for youth age 11-16 years old. These trips include experiences like camping alongside active glaciers, hiking to the headwaters of the Mighty Hudson River, biking along the shores of Lake Ontario, or hiking in the Northern Rockies to name a few. Trips chosen are based on experience, age, interests and desired level of challenge.

Yet another program Frost Valley offers is the *Tokyo/Frost Valley Partnership*, which serves the Japanese community in the tri-state area. When this program began in 1979 its main objective was to establish YMCA programs for Japanese families bringing them together with American families to share experiences and skills that would not only make their stay in a foreign country more pleasant but also enhance both cultures. Today the partnership reaches more than 2,000 participants annually through a broad spectrum of services. Also offered is a typical camp experience providing cultural stability for all age Japanese children by immersing them in their own language and culture, while also giving them a cross-cultural experience through the Frost Valley Resident Summer Camp (two three week programs, 6-9 year olds), plus a four-week Sports Camp for a wide range of ages and athletic abilities. The last two weeks of the summer are dedicated to the Partnership's Language Camp; an intense program helping strengthen English-As-A-Second-Language skills and a Japanese language immersion program in preparation for the family's return to Japan. Some of the Partnership counseling staff are placed directly from the Tokyo YMCA. The camper's summer experience is a blend of summer camp fun and extensive youth group work framing. This leadership program has won national acclaim in Japan and welcomes many observers every summer.

Ski Camp is an additional program held in December and February at Frost Valley for Japanese children in cooperation with the Belleayre Mountain Ski Facility and its Ski school instructors. Children enjoy skiing with the Japanese youth leaders for 5 or 6 days or participate in one-day ski programs throughout the winter season. Family ski programs are scheduled for the entire family during varied weekends utilizing the excellent downhill and cross-country skiing in the area.

The *Father-Son Program* assists Japanese fathers whose corporate pressure, long hours and weekend business-related commitments make it difficult for them to spend more time with their children. This program, helps fathers make their sons their top priority

for a weekend in the spring and fall. The success and popularity of this program has led to the development of the father-daughter program. Other programs in this joint partnership include the November one week Environmental Education Workshop for participants from Japan. The program explores environmental education principles and practices at Frost Valley and draws participants from a wide range of occupations.

The *Frost Valley environmental education* program began in 1969, with the goal of providing a quality residential school experience in the outdoors for students Kindergarten through 12th Grade. The program is designed to complement a scholastic curriculum and to provide students with hands on experiences in the natural science as well as challenging their physical, social and cognitive skills. The focus is multi-faceted education and offered are 50 different educational courses from which schools can choose to supplement their own curricula. Central to this environmental educational process are group activities that enhance and promote communication skills and foster the establishment of mutual trust through team building activities.

While at Frost Valley, students are asked to take responsibility for themselves, for their friends and for their environment. These lessons begin in the dining hall where students set and clear their own tables. Students are also asked to weigh food waste to help them and their teachers develop an understanding of how much waste can be produced in just one sitting. All waste is then processed in one of the largest food recovery programs in the country. Students participate by separating compostable from non-compostable waste and learn how it is transformed into a valuable resource for Frost Valley's own greenhouses and agricultural programs.

Frost Valley Raptor Center is a NY State and federally accredited raptor site. The center functions as a means to educate people on the important roles raptors play in wildlife ecology. Raptor education also focuses on issues of wildlife conservation, environmental awareness and human impact/influence. The center houses six

permanently injured birds and trained staff focus on the care, handling and feeding of these residents. The facility is not permitted to house birds that may be rehabilitated and released back into the wild and consequently the focus is on student's education of raptor ecology. Approximately 15,000 guests visit the Raptor Center annually whether they are weekday school groups or weekend guests. These visits take the form of wildlife ecology classes, night hikes or a Raptor Center tour.

Frost Valley has long sought out and nurtured relationships with research entities and has been partnered with the United States Geological Survey since 1984 when they initially conducted research into acid rain and climate changes. The Frost Valley Streamside Classroom is the result of a 1995 grant funded educational partnership between the YMCA and USGS, and offers students and teachers an opportunity to study a watershed system in natural settings. Environmental studies performed at Frost Valley, provide valuable information on current issues such as acid rain, nitrogen saturation in northeastern forests and global change. This positive relationship has resulted in other scientific organizations using Frost Valleys facilities for long term research and include the Institute of Ecosystems Studies, a division of the New York Botanical Garden partnering to monitor the effects of atmospheric pollutant deposition on forests and streams in the Catskills, as well as the New York City Department of Environmental conservation, the Watershed Agricultural Council, US Forest Service, SUNY Environmental Science and Forestry at Syracuse, the New York State Department of Environmental Conservation Forestry Bureau, and Cornell University.

Another important educational component is the Luke Roehm Technology Learning Center (1998), a state of the art technology lab, whose goal it is to integrate environmental science and appropriate technologies in the outdoor, environmental education classroom. The central focus is the long-term assessment of Catskill ecosystem health and many projects are citizen projects with Frost Valley guests serving as field scientists for the collection on long-term ecological data. These include:

weather and atmospheric pollution, water quality and watershed processes, forest ecology, wildlife ecology and sustainable “green” facility. In addition to research, Frost Valley is working toward introducing more of these science technologies (such as GIS and ESRI mapping software) into the teaching practices of environmental education. “Computerized mapping coupled with experience-based lessons have given our students a full view of the forests, taking into account both time and space through comparative temporal GIS projects.” (John Haskin, Frost Valley Associate Executive Director, Programming.)

Appendix VI: Wild, Scenic and Recreational Rivers Act

Wild, Scenic and Recreational Rivers (WSRR) Program

The New York State Wild, Scenic and Recreational Rivers System Act (ECL Article 15, Title 17) was first passed into law in 1972 in order to preserve designated rivers in a free-flowing condition and to protect the rivers and their immediate surroundings (“river areas”) for present and future generations.

The Act defines three classes of rivers: wild, scenic and recreational.

- Wild rivers must be longer than 5 miles with no diversions or impoundments, accessible only by water, foot or horse trail, and in an area that is primitive and undeveloped. Additionally, for a river’s designation as wild, it must be at least a half-mile from the nearest public road or publicly accessible private road.
- Scenic rivers must have no diversions or impoundments and in an area that is primitive and undeveloped, or in areas that are used for agriculture, forestry, or other dispersed human activities that do not constrain the public use and enjoyment of the river.

- Recreational rivers are readily accessible, and may have a significant amount of development in the river areas and may have been diverted or impounded in the past.

River areas are up to one-half mile in width from each bank of a designated river and are included and protected under the terms of the Act. A width of less than one-half mile can be established, such as a variable width based upon identification of important natural and cultural river-related features, or a constant width such as one quarter mile. The designated river and its adjacent river area are treated as a unified and integrated resource area. The boundaries of river areas for each designated river are established by the NYS DEC.

Management of designated rivers varies by classification.

- Wild rivers are managed to perpetuate their wild condition.
- scenic rivers are managed to preserve and restore their natural scenic qualities, and
- recreational rivers are managed to preserve and restore their natural, scenic and recreational qualities.

The Act provides for the inclusion of additional rivers to the system by an act of the New York State Legislature. The Legislature may designate part, several parts, or all of a particular river.

As a result of the Act, the NYS DEC created regulations under which the Act would be administered and managed (outside of the Adirondack Park, where the Act is administered and managed by the Adirondack Park Agency). As part of the process, an Environmental Impact Statement was prepared by the NYS DEC. As a result, the regulations, found in Part 666 of 6 NYCRR, became effective in March of 1986.

Once a river is designated as wild, scenic or recreational, there are restrictions on what can happen to the river and in the river area. A river management plan is prepared

either by the DEC, or by or in conjunction with local government entities. Management plans are subject to review by the public and by final approval by the DEC. A management plan includes a delineation of the boundaries of the river area that is designated with all of the known natural, aesthetic and cultural resources of the river, the existing land water uses, land ownership and any land and water use controls, management devices and programs currently in place. A management plan details a program plan that addresses any existing and potential issues, problems and protection needs. Plans for protection of resources as well as restoration projects are also included. The specific goals and objectives for the river are laid out in the plan and policies, standards and management guidelines are also set forth. Specific regulations with respect to land use are also devised to help meet protection goals.

All existing land uses, structures and improvements that are legally allowed prior to the river area designation may continue to exist in the same manner once the designation is put into effect. Thereafter, within a designated river area, a permit is required for any action that falls under the classification of a Type I action, according to the NYS DEC NYCRR. Permit applications are filed with the NYS DEC and are issued when it is determined that the proposed land use or development is consistent with the purposes and policies of the WSR Rivers System Act, will not result in an adverse environmental impact on the valuable resources identified for a river area and no reasonable alternative exists for the proposed activity outside of the river area. Variances can be granted in the case that the denial would cause undue hardship on an applicant or when zoning regulations cause practical difficulties for an applicant. Furthermore, any applications made by public entities must be environmentally protective of the river values identified and fulfill a public health, safety or welfare function.

Actions within wild river areas which do not require a permit include forest management (excluding roads) and other vegetative cutting beyond 100 feet from the river bank, the development of forest management roads, including bridges, beyond 150

feet of the river bank, operation of motor vehicles for forest management purposes and non-motorized open space recreation uses.

Actions within scenic river areas that do not require a permit include those uses listed above for wild river areas as well as:

1. agricultural uses,
2. agricultural use and forest management structures,
3. game preserves and private parks,
4. lean-tos less than 200 square feet,
5. non-motorized open space recreation uses including bridges other than bridges over the designated river,
6. structures 500 feet from the river bank,
7. use of motorized equipment required for allowable uses in scenic river area, and;
8. public utility uses that do not constitute major public utility uses, do not cross the designated river and are located 500 feet or more beyond the river bank.

Actions within recreational river areas that do not require a permit are the same as those uses listed above for both wild and scenic river areas.

There are specific restrictions and standards that are applied to structures, roads, trails, bridges and motorized access, water quality, waste disposal, signs, public utility uses, forest management and vegetative cutting. These restrictions often vary according to the river designation, with the most restrictions being placed on wild rivers, followed by scenic and then recreational.

The permit system that has been established for the WSR River Systems Act is administered by the NYS DEC and all of the basic information is include on their website: <http://www.dec.state.ny.us/website/dcs/wsrr/wsrr03.html>. Application forms are downloadable.

The Practical Application of the Program

The New York State Department of Environmental Conservation has been administering this program for the purpose of supporting local land use planning in its efforts to protect the natural resources associated with major rivers that offer the citizens of New York special resources. The Program provides for the local authorities to take over the administration of the Program for a River segment in their own jurisdiction, and as such, honors the concept of “home rule”. This sort of flexibility was incorporated by the enacting legislation, as evidenced in the manner in which the original regulatory amps were developed, and in the feature of the law which allows movement of the jurisdictional boundaries according to a set of criteria which can include local economic initiatives. In fact, the creation of different “classes” of River segments in the law is recognition that all River segments are not equal, in quality or sensitivity to impacts. And, as in most environmental laws, there is a process for allowing variances that includes a strong local interest element, and this process can be further enhanced through the local take-over of the program.

The local administration of the WSRR is achieved by the submission to, and approval by, the NYS DEC Commissioner of a “River Management Plan”. This “Plan” requires that the locality requesting the lead role in WSRR jurisdiction provide the information necessary for, at the least, protection that is as strict as that envisioned in the Law. However, if a local government agency can demonstrate its qualifications to

administer the law, then that agency should be afforded the opportunity to include flexibility that addresses specific local concerns. In providing this “home rule” mechanism, the State has acknowledged that all of the State’s major Rivers are not the same in their relation to local land use and commerce. Unfortunately, to date it does not appear as if any local agencies have taken over this program. Yet, the DEC has experienced widely differing circumstances in the administration of the program to Rivers in very different areas (i.e., Long Islands Peconic River compared with the Salmon River).

The application of the WSRR program in a particular area begins with the State’s process of designating a River as being part of the WSRR program. In the case of the Salmon River, this process must first begin with a local initiative to designate the River, and would include a substantial amount of work for, or on behalf of the NYS DEC. Since the restrictions differ significantly between the classes of River segments, there would be some debate on the drawing of lines distinguishing between Wild, Scenic and Recreational segments. Based on the Salmon River Greenway Corridor Bioinventory of 2001, it is apparent that the segments of the River would be designated on criteria related to the recreational fishery. The lower end of the River, where Route 3 crosses the widest part of the River and there is a State Park, would be designated Recreational, and perhaps the reach of the River up to Pulaski would also be Recreational. The natural resources of the River extending upstream from Pulaski (or Clark’s Falls) to Altmar are exceptional, including a number of areas which would make this stretch a candidate for Scenic designation. Certainly, the protective restrictions of the Scenic class are necessary to ensure long-term water quality conservation through areas such as the tributary mouths of the Trout and Orwell Brooks. The stretch of the River upstream of Altmar has been designated as a no-kill, fly-fishing zone because of the importance of this segment to Salmon breeding. Yet, some industrial uses have been conducted here in the form of utility plants and dams. Nevertheless, in concert with the Fly-

fishing only zone, this segment of the River would best be served by being designated as Wild under WSRR.

The addition of the Salmon River to the WSRR Program would require an action by the State, after a public hearing process, and then a further action by a joint commission or other intergovernmental body merging the interests of the Towns which comprise the River Corridor. The joint action would require the preparation of a River Corridor Management Plan, much of which is already done or underway, as far as background information is concerned. However, in order to implement the particular interests of the Salmon River Corridor population, the River Management Plan would also have to include specific standards that mirror or adjust the zoning and land use restrictions presently provided by the Statewide WSRR standards. In addition, the joint authority would have to designate one or more permitting and enforcement offices. These could be the existing land use and building departments within each Town, unless a new office is created.

The advantage of using the existing agencies would be in the execution of the SEQRA requirement of the joint permit application process under the Uniform Procedures Act of the NYS ECL. Under this requirement, and for any State permit under the Environmental Conservation Law, it is necessary for a Lead Agency to make a determination of the significance of the potential impacts of an action, and then, if deemed potentially significant, to pursue the studies necessary to resolve the impact, and provide for mitigation as science would dictate. This element of the WSRR program could be very important to the Salmon River Corridor, especially if the local population desires flexibility in what could otherwise be strict standards. For example, there are setbacks to the River or sensitive habitats inherent in protection of such resources. However, in providing for the recreational fishery, some instances could arise where relief from these setbacks could be logical. Accordingly, the mitigation mechanisms available to protect against, for instance, polluted parking lot runoff must

be studied and employed to justify the relief on a setback requirement. The consideration of such issues, if they get complex, should be the subject of a SEQRA review, in support of issuing a permit for a particular activity.