

## **SECTION II – Inventory and Analysis**

### **A. Regional Setting and Community Characteristics**

The Town of Somerset is located on the south shore of Lake Ontario, in the northeast portion of Niagara County, New York as shown on [Map 2 – Regional Setting](#). It is situated between the Town of Yates (Orleans County) to the east, Town of Hartland to the south, and Town of Newfane to the west. The Town shares its northerly boundary with approximately 8.7 miles of the southern shoreline of Lake Ontario. Within the western New York region, Somerset is situated approximately 30 miles outside the Buffalo metropolitan area, with the City of Lockport located approximately half-way between.

The Town encompasses approximately 36.7 square miles in land area and is generally rural in character. Within the Town, the Village of Barker serves as a residential hamlet and center for community services. While the village provides significantly to the general character of the Town, it is located outside the designated Local Waterfront Revitalization Area (LWRA). The smaller hamlet of Somerset, which is also located outside the LWRA, also contributes to character to the Town as a whole.

The Town of Somerset has experienced generally continuous growth in population (6.7% annual average) since the 1940's. While the overall population and number of households, has continued to grow, the Town's rural community character and agricultural base has remained. With few exceptions, residential development has occurred at low densities and outside the Village. One of those exceptions has been residential development in certain areas along the lakeshore. Generally, growth outside the Village has been residential with commercial uses occurring in the Village. Industrial growth consists primarily of the AES power generating plant situated on the lakeshore.

This continuing growth and development of the Town and a concern for properly managing shoreline development, particular the potential use of land in the vicinity of the AES plant, has raised the need for the recent Comprehensive Plan and the Local Waterfront Revitalization initiatives.

## **B. Upland Uses**

### **1. Existing Land Use**

Land uses along the waterfront in the Town of Somerset within the LWRP study area are characterized by a mix of residential and agricultural uses, with some industrial, park and commercial properties, as depicted on [Map 3 – Existing Land Uses](#). While the industrial and commercial properties are limited in number, they account for a significant amount of land area. The key land use categories found in the LWRP study area are further described and quantified below.

**Residential** - There are approximately 286 residential parcels, accounting for 358 acres in the 11,113 acre LWRP study area. The smallest residential properties occur along the lakeshore in clusters on Huntington Beach Road, Lake View Drive, Lakeshore Road and Somerset Drive.

**Agricultural** - Agricultural lands comprise approximately 27 parcels, accounting for 1,622 acres in the LWRP study area. Land area in active farm production in Somerset declined between 1968 and 1978 by 3,115 acres. However, between 1978 and 2002 the declining trend stabilized and active farmland increased by approximately 100 acres. According to the U.S. Census of Agriculture, the number of farms in operation in the Town has also remained essentially stable between 1992 and 1997 (the most recent year available). For comparison, the number of farms in Niagara County over the same time period decreased by 8.2 percent, from 749 farms to 687. Approximately 81 percent of the farms in the area are in the 50 to 999 acre size range, compared to 64 percent in this size range in 1992.

**Commercial** - There is limited commercial activity in the LWRP study area, consisting of approximately 6 parcels comprising of 124 acres. The largest commercial properties are the private camps and commercial campgrounds. The YMCA Camp Kenan (47 acres) and the Lighthouse Christian Camp (77 acres) are private camps. Haight's Park Campground (79 acres – within the LWRA) and Brown's Camp (31 acres) are commercial campgrounds. The camps and campgrounds represent less intensive uses than their commercial designation implies. Also, in the case of the commercial campgrounds, the active campground areas do not cover the entire parcel, but do utilize the waterfront.

Industrial - The most significant industrial land use in the LWRP study area, as well as the Town, is the AES Somerset power generating plant. At approximately 1,100 acres AES accounts for 4.6% of the study area. The power plant contains large areas of undeveloped property, including approximately 2.3 miles of undeveloped shoreline.

Vacant - There are approximately 85 vacant parcels, consisting of 1,169 acres, or approximately 10% of the LWRP study area. Vacant lands include a combination of wood lots or abandoned agricultural fields. As noted above, a significant amount of additional undeveloped lands are undeveloped areas owned by the AES Somerset, LLC.

Parkland - There are two public parks along the shoreline within the LWRP study area. The larger of the two parks on is Golden Hill State Park. This park is a 511 - acre state-owned facility that contains a campground, nature trails, picnic areas and shelters, and playgrounds. The park facilities include a boat launch and offer public access to Lake Ontario for fishing, boating and other water-related recreational uses. There are 60 campsites. A unique feature of this park is the Thirty-Mile Point Lighthouse, a historic lighthouse built in 1875. The lighthouse, which is listed on the National and State Registers of Historic Places, is a popular tourist attraction, and was featured on a US Postal Service postage stamp in 1995 as the representative for Lake Ontario in a series of lighthouse stamps. Boat and camping facilities are open from April through October, while the remainder of the park and lighthouse are open year-round. Excellent views of the Lake Ontario shoreline are available from this site. The Village of Barker owns and maintains the Barker Bicentennial Park on Quaker Road at the lakeshore. The park is 1.5 acres in area and provides public access to the waterfront for fishing.

## 2. Zoning and Other Land Use Regulations

Within the Town of Somerset, land use is controlled by the Zoning Code (Chapter 205 – Zoning) and by Subdivision Regulations (Chapter 171 - Subdivisions of Land). Zoning in the Town includes four residential categories (agricultural, single-family, single and two family, and a lake shore residential district), one business district, two industrial zones (industrial and general industrial). The code also allows a planned unit development (PUD) or mixed use floating zone designation to be applied on a site-by-site basis. It should be noted that the "planned business areas" district of the code also encourages PUD's. Zoning is depicted on [Map 4 – Existing Zoning](#).

The zoning districts that occur within the LWRA are listed below along with a summary of the land uses identified as permitted uses by right and uses allowed with a special use permit (SUP) from the Planning Board:

#### Agricultural District

Within the LWRP study area, properties in the Agricultural District account for the largest land area in any zoning classification. While most of the agricultural land is not located directly on the waterfront, it is still important to consider because lands in agricultural receive the most development pressure. Also the nature of typical agricultural uses may result in the use of materials or practices that can potentially be threats to water quality. Landuses allowed in the Agricultural District include:

Single-family residential dwellings and accessory structures on lots having a minimum area of 60,000 square feet, and Farms and accessory structure and uses.

Uses allowed by Special Use Permits include Public utilities (SUP), Campgrounds (SUP), Mobile Home Parks (SUP), Air Strips (SUP), Retirement Homes (SUP),

Public Buildings (SUP), Churches (SUP), and Municipal Parks (SUP).

#### R-1 Single-Family Residential District

The R-1 Single-Family Residential zoning district occurs in the area on either side of Lower Lake Road, north of Fish Creek and south of Lake View Drive. This area is within the sewer district and has the potential for increased residential development. Allowed land uses in the R-1 District include Single-family residential dwellings and accessory structures on lots having a minimum area of 20,000 square feet. Cluster residential development (SUP) and Animal Husbandry (SUP) are permitted as special uses.

#### RLS Lake Shore Residential District

Approximately one-half of the entire lake shore falls into the RLS zoning district. Within this area, approximately 50 individual parcels are vacant and can possibly be developed for uses allowed in this district. Permitted uses are limited. They include Single-family residential dwellings and accessory structures on lots having a minimum

area of 20,000 square feet, and Cluster residential development (SUP) by special use permit.

## I Industrial District

The Industrially zoned lands along Hosmer Road include the railroad tracks and power transmission lines. This is unlikely to change as long as the AES Power Generating Plant is in operation. Allowed land uses in the Industrial District include Laboratory, Assembly, Manufacturing, Food processing, Wholesale business, Office uses, and Farms.

## PUD Planned Unit Development

The AES Power Generating Plant is located within the PUD zoning district. This property represents the single largest privately owned property within the LWRP study area and potential expansion or re-development could have significant impacts on the waterfront. Allowable land uses in the Planned Unit Development Zone are the same as those allowed in the Lake Shore Residential District, R-2 Single- and Two-family Residential District, B Business District and the I Industrial District.

## Public Lands

There are two areas within the LWRA that are not included in a zoning district. The area within the Golden Hill State Park and Town owned property (Wastewater Treatment Plant) are depicted on the zoning map 'as islands' outside the surrounding zoning district. Typically local zoning does not apply to higher levels of governments and county, state and federal properties are not subject to local zoning regulations. Because the Golden Hill State Park is owned by New York State it is exempt from zoning regulations. Town property (the WWTP) is not subject to changes in use where zoning regulations would be applicable.

The Town's subdivision regulations are fairly standard regulations, with procedures for both minor subdivisions (4 or less lots, not involving public infrastructure improvements or extensions) and major subdivisions (more than 4 lots). A minor subdivision approval is a two step process with sketch plan and minor subdivision plat review. A major subdivision requires three steps: sketch plan, preliminary plan review, and final plat review.

The zoning code establishes height and bulk regulations, site plan specifications, development standards, required improvements, and penalties. The regulations include the authority to approve cluster development.

Within the LWRP study area there are several vacant properties that may be susceptible to future subdivision and residential developments. In addition, development pressures may also increase on agricultural lands within the sewer district. For these reasons it is important that the Town's subdivision and zoning regulations remain up-to-date as they are the Town's primary land use controls.

Other codes in the Town of Somerset that affect land use in the Town include: "Bed and Breakfast establishments", "Campgrounds and Vehicle Parks", "Environmental Quality Review", "Excavations", and "Mobile/Manufactured Homes".

Bed and Breakfast establishments are allowed by special use permits throughout the Town.

Campgrounds and Vehicle Parks establish a yearly permit requirement for these uses that are allowed in an agricultural district by special use permit.

Chapter 92 of the Town Code, known as Environmental Quality Review, is the local State Environmental Quality Review (SEQR) requirement for all development projects in the Town. The Town's SEQR code was adopted in 1977. Since then, the State has amended 6 NYCRR Part 617, the SEQR regulations, causing the Town's SEQR code to become outdated. The Town should either amend or repeal this law.

Excavations regulates excavation activities in the Town.

Mobile/Manufactured Homes establish standards for these uses, which are allowed by special use permit in agricultural districts (controlled by yearly license).

### 3. Land Ownership Patterns

The land ownership within the Somerset LWRP study area varies significantly by size ranging from over 1,000 acres to less than an acre. By any measure (number of parcels, land area, or lakeshore frontage) the majority of property in the LWRP study area is in private ownership. The largest privately owned property in the study area includes approximately 1,100-acres owned by AES Somerset, LLC, with 1.5 miles of

lakeshore frontage. There are relatively few other large vacant parcels that front on the lakeshore. However, two adjacent vacant parcels that adjoin the AES property at the western end of the LWRA have a combined frontage of approximately 1.1 miles and have the potential for future subdivision. Together these three properties represent over 2.3 miles of shoreline and over 1/4 of the Town's lakeshore.

Along the lakeshore there are two commercial campgrounds (Haight's Park Campgrounds and Brown's Camp) and two private camps (YMCA Camp Kenan and the Lighthouse Christian Camp). These camps do not utilize their entire property as intensely as the zoning would allow (either residential or commercial). There are numerous homes on small lots along the lakeshore having access from Huntington Beach Road, Lake View Drive, Lakeshore Road and Somerset Drive. These residential properties are interspersed with approximately fifty vacant lots.

The Golden Hill State Park occupies approximately 511 acres and has approximately 1.5 miles of waterfront. The only other publicly owned lands include the Village of Barker Bicentennial Park on Quaker Road; Town/Village wastewater treatment plant on Quaker Road at Lower Lake Road; and the Sawyer Cemetery on Lake Road.

#### 4. Water-Dependent and Water-Enhanced Uses

The Lake Ontario shoreline within the Somerset LWRA is not heavily developed with uses that are dependent on their waterside location, as shown on [Map 5 – Water Related Uses](#). The only water-dependent uses along the waterfront include The AES power station, which utilizes lake water for cooling and Golden Hill State Park, which has a boat launch.

The Somerset LWRA primarily consists of water-enhanced and non-water dependent uses. The LWRA includes approximately 126 private residences, which are water-enhanced. Large non-residential properties along the lakeshore that are water-enhanced uses include Haight's Park Campgrounds, Brown's Camp (both commercial campgrounds; the Lighthouse Christian Camp and the YMCA Camp Kenan (both private camps).

The LWRA contains certain lands, some of which are located directly along the shoreline, that support, and are zoned for, non-water dependent agricultural uses. Most vacant land in the LWRA is in the Agricultural (A) District. Any undeveloped industrial land is part of the AES power station and located in the Planned Unit

Development (PUD) District. In 2001, several modifications were made to the Town Zoning. At this time, considering that there is very little development pressure along the shoreline, and that the current zoning reflects the Comprehensive Plan, the Town believes the zoning within the LWRA adequately meets its needs for the foreseeable future.

## 5. Tourism

There are no extensive tourism services found within the LWRA. Tourism activities are centered around recreational camping and fishing. Golden Hill State Park offers a lakefront location with camping, hiking, picnicking and boat launch facilities. The Thirty-Mile Point Lighthouse is also located within the State Park. The lighthouse living quarters are a popular destination to rent for overnight accommodations.

There are two private camps YMCA Camp Kenan and Lighthouse Christian Camp. There are also two privately owned commercial campgrounds located on the waterfront; Haight's Park Campgrounds and Brown's Camp, offering camping along with fishing and boat access to the waterfront.

Other tourist attractions include the Babcock House Museum operated by the Town of Somerset Historical Society and located on Lake Road. Commercial and retail services and restaurants are found outside the LWRA in Village and local hamlets.

Tourism in the LWRA is seasonal, with boating occurring from early May to late October. The private camps and campgrounds do not operate in the winter. However, Golden Hill State Park does offer cross-country skiing, snowmobiling, and snowshoeing.

The New York Seaway Trail follows Lake Road (NYS Route 18) in the vicinity of the Somerset LWRA. The Seaway Trail is a recognized scenic route paralleling Lake Erie, the Niagara River, Lake Ontario and the St. Lawrence River. This corridor is a designated National Scenic By-way. The Seaway Trail route is well marked and promoted as a tourism destination and as an alternative to the NYS Thruway and other interstate highways. The NYS Seaway Trail is a membership organization that encourages tourism and economic development in the communities along the Seaway Trail corridor by marketing the scenic byway designation.



### **C. Surface Waters and Surface Water Uses**

Topographically, the entire northeastern part of Niagara County drains toward Lake Ontario via several major drainage courses including Johnson and Marsh Creeks, which extend easterly into Orleans County, and Fish and Golden Hill Creeks in the Town of Somerset. The LWRA is within the Golden Hill Creek drainage basin and the Johnson Creek drainage basin. Fish Creek and Gold Hill Creek and their tributaries represent the primary drainage courses to Lake Ontario. There are no major lakes or ponds within the LWRA.

Golden Hill Creek divides the Town in half, running from the extreme southwest corner of the Town to the northeast, through Golden Hill State Park. Golden Hill Creek has its headwaters near Town Line and Hosmer Roads and flows approximately 10 miles northeast through the Village of Barker and through Golden Hill State Park and discharges into Lake Ontario, just west of the boat launch. All land south of Golden Hill Creek and lands parallel to the creek, for approximately 1,000 feet to the north also drain to Golden Hill Creek.

All land lying generally north of the parallel line approximately 1,000 feet north of Golden Hill Creek, and below an elevation of 330 feet, drains to the north into Fish Creek or its tributaries, or to a small west branch of Golden Hill Creek. An exception is a small area on the AES Somerset property, which drains directly into Lake Ontario. Fish Creek flows approximately 7.5 miles from its headwaters near Hoffman Road in a northeast direction through the AES power station property and along the Barker Somerset Wastewater Treatment Plant facility, eventually discharging into Lake Ontario, west of Johnson Creek Road. A lesser, intermittent stream flows parallel to and just south of Fish Creek and outlets directly to Lake Ontario between Johnson Creek Road and Snell Grove Road.

In general, creeks and their banks remain in relatively natural conditions where they flow through the LWRA. The goals and policies section of the Somerset Comprehensive Plan suggests specific policies to guide local decision making in order to protect the creeks from the adverse effects of development. The implementation of these policies would help to allow for the protection of these waterways.

## 1. Marinas, Docks and Bulkheads

There are no marinas or permanent docks within the LWRA. The only boating facility accessible to the public is the boat launch ramp located in Golden Hill State Park. One ramp is available for transient users to launch and load small boats. There is also approximately 50 feet of floating dock and 1 stationary dock that are removed seasonally. Boat launch and dock facilities are open from April through October. Park user and parking fees range from \$5 to \$7. Outside the LWRA, the nearest marinas are in Olcott to the west and Lakeside to the east.

Outside the State Park only two concrete boat launch ramps on private properties were observed. One was at the Christian Lighthouse Camp, and the second was at a private residence on Lakeshore Road at the foot of Johnson Creek Road.

The use and need of shoreline protection varies within the LWRA based upon the varying height of the bluff and on the land use. Much of the LWRA shoreline generally west of Quaker Road, including the highest bluffs, remains natural.

Shoreline protection is in place along the residential some reaches of the waterfront. Shoreline protection consists of either large boulders placed at the bottom of the bluff or concrete walls. Walls are not consistent along the shoreline and occur at approximately a third of the homes. The walls are in various states of repair. Some are cracked and leaning into the water. There are few new walls. Many residences have wooden or concrete steps between the top of the bluff and the beach. Along Somerset Drive the bluff is somewhat lower than further west and the use of walls is less common. Rock armoring is in place.

At the Village Park there are two small piers approximately 24 inches wide and approximately 30 feet long that are remnants of an old water-pumping station. Today people use these piers to fish from.

Some of the highest bluffs occur within the State Park in the vicinity of the Thirty-Mile Point Lighthouse. In this area large boulders are placed at the bottom of the bluff for protection against erosion.

## 2. Vessel Use and Navigation

There is limited navigational use along the Somerset waterfront. Small pleasure craft are used for recreation and fishing. There are no commercial vessels in the area. The creeks tributary to the lake are not navigable. Various residents along the shoreline have boats but do not have permanent docks. According to interviews of park personnel, personal watercraft are becoming more popular with park users.

The lake bottom is rocky from the shoreline out to depths of 30 to over 50 feet where the bottom transitions to mud and clay. There is one area having a sandy bottom just west of Thirty-Mile Point. According to National Oceanic & Atmospheric Administration navigation charts rock obstructions occur along the shoreline that cover and uncover at depths up to 6 feet. Other obstructions and features include cribbing off the AES site and the Wastewater Treatment Plant outfall.

### **D. Public Access and Recreation**

Public parkland and waterfront access is limited to a few facilities within the Town of Somerset LWRA. These facilities are depicted on [Map 6 – Public Lands and Cultural & Historic Resources](#). Golden Hill State Park is located along Lake Ontario at the easterly boundary of the Somerset LWRA. It is surrounded by agricultural lands and the Lighthouse Christian Camp to the west, by Lower Lake Road (County Road 82) to the south and Niagara-Orleans County Line Road (County Road 50) to the east. The 511-acre park contains a 72-site campground, recreation building, nature trails, picnic areas and shelters, playgrounds and a boat launch ramp. The park facilities offer public access to the lake for fishing, boating and other water-related recreational uses. A unique feature of this park is the Thirty-Mile Point Lighthouse. This State-operated park provides regional recreation and waterfront access opportunities.

The Village of Barker owns and maintains the Barker Bicentennial Park on Quaker Road on the lakeshore. The 1.5 acre park provides public access to the waterfront for fishing. Picnic facilities and restrooms are available on a seasonal basis.

There are two private camps and two commercial campgrounds that offer waterfront access to patrons and visitors. Their waterfront locations provide all four of these facilities significant scenic views of the lake and surrounding area.

The Town also has provisions for potential future park facilities within the property currently owned by AES Somerset, LLC. The original owner, New York State Electric and Gas (NYSEG), was directed to work with local officials to prepare a multiple use plan for their site as part of their approval to build what is now known as the AES Somerset power generating station. The approval, granted in the mid-1970's by the Siting Board, required a multiple use plan that would provide for the recreational needs of the community and to replace land previously designated by the Town for future recreation use. Under the leadership of the staff of the Erie and Niagara Counties Regional Planning Board, a multiple use plan for the power plant site was prepared and adopted by the Somerset Town Board, the Power Company, and various regulatory agencies. The plan provides for continued access to the lake and a combination of active and passive recreation uses to be implemented over a long-term period. The Town Planning Board also approved the multiple use plan, and it reflects the policy of the Planning Board relative to the proposed future use of that portion of the power plant site (approximately 30 acres). While there are no current plans to implement the multiple use plan, the Town wishes to retain its rights for the future recreational use by incorporating it into their LWRP and recently completed comprehensive plan.

## **E. Historic and Cultural Resources**

The area known today as Somerset was first settled in 1810 and officially organized in 1823 from holdings of the Holland Land Company, with rail service commencing in 1876 and Village incorporation in 1908. A key historic resource resulting from the early development of Somerset is the Thirty-Mile Point Light House.

The Thirty-Mile Point Lighthouse, built in 1875, is a popular tourist attraction. The Lighthouse is listed on the National and State Registers of Historic Places. The lighthouse was also featured on a US Postal Service postage stamp in 1995 as the representative for Lake Ontario in a series of lighthouse stamps. The 70-foot high stone and brick lighthouse is located on the most northerly point of land along the south shore of Lake Ontario. The lighthouse operated from 1875 until 1958, when a steel tower with an automatic revolving light replaced it. In 1984, New York State took possession of the abandoned building from the United States Coast Guard for the purposes of including the property in Golden Hill State Park. At that time the structure was listed on the Federal and State Registers of Historic Places.

The Babcock House Museum, built in 1848, occupies a cobblestone farmhouse at 7449 Lake Road. The structure is owned by the AES Somerset, LLC but furnished and maintained by the Town of Somerset Historical Society. The structure is historically significant because it was the farmstead home of Jephtha Babcock, the first postmaster in the western section of Town, Supervisor of the Town of Somerset and a NYS Assemblyman.

Within the Town of Somerset, archaeological resources may also be found. In this regard, the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) was queried to determine if any known archaeological or additional historic resources are known to exist within the study area or if the entire area has been identified as a zone of archaeological sensitivity. According to the OPRHP response, there is a documented archeological site in or adjacent to the LWRP study area. Therefore, a phase 1 archeological survey may be required during the approval process for any project(s) located within 1 mile of the archeological site.

#### **F. Scenic Resources**

There are no Scenic Areas of Statewide Significance within the Somerset LWRA as designated by the Secretary of State. (SASS's are limited to 6 areas in the Hudson River Valley).

Although not formally designated, the scenic resources along the waterfront in the Town of Somerset are locally important. These scenic resources consist primarily of the dramatic vistas of Lake Ontario and its shoreline. Excellent views of the Lake Ontario shoreline are available from the site of the Thirty-Mile Point Lighthouse in Golden State Park. Lake Road (State Route 18), which runs parallel to the lakefront, is a segment of the NYS Seaway Trail, a designated National Scenic By-way. Scenic views are also available from the private camps and residences located along the shore. Scenic views of the lake should be protected and improved wherever possible through the Site Plan review process.

## **G. Public Infrastructure**

### **1. Water Supply**

At the present time, the entire Town of Somerset is served by public water provided from the Niagara County Water District. The source of water is the west branch of the Niagara River.

Service is provided to Barker through a 10-inch line located on Quaker Road, which connects to a 24-inch line coming easterly on NYS Route 31 from the direction of Lockport. There are also two 10-inch water mains located along Route 18 and West Somerset Road that tie into the Town of Newfane, which are part of the Niagara County Water District. An 8-inch line also extends easterly from Wilson, along Lake Road. An additional 8-inch waterline is located on Haight Road with 10-inch lines on Coleman and Johnson Creek Roads. The areas west of Golden Hill State Park on Lower Lake and Somerset Roads are served by 8-inch lines, with a 10-inch line on Carmen Road. In general, the Town is well interconnected to the Towns of Newfane and Hartland, and the water system is fairly up-to-date and in good condition.

The Town of Somerset Comprehensive Plan indicates that currently, the Town water requirements are averaging 340,000 gallons per day, for domestic and industrial use. According to the County's Comprehensive Public Water Study, this usage was forecast to increase to 1.66 MGD for the Town by 1990. However, that forecast was not realized and there are currently no quantity or quality deficiencies in the public water distribution system.

### **2. Sanitary Sewer**

The Somerset-Barker Sewer District was created in 1977. The Sewer District, serving the central area in the Town of Somerset, covers the LWRA between the AES power plant (north of Lake Road) to the mouth of Fish Creek. Sanitary sewer service is not provided to the entire LWRA. The areas served within the LWRA include Quaker Road, Hartland Road, Lower Lake Road and Somerset Drive. The Sewer District was extended around 1980 to provide domestic sewerage treatment to AES.

Dense areas of residential development within the LWRA that are not served by public sewer include Lake Shore Drive and Somerset Drive between the mouth of Fish Creek and Golden Hill State Park. Within these areas individual residences utilize on-site

septic systems. These residences are located on relatively small waterfront lots and as the on-site septic systems fail health and safety issues arise. Newer and replacement systems often are required to be sand filter systems, which are both more expensive for the homeowner and demand more treatment area. In the future, as older systems fail and newer in-fill development occurs, the Town will continue to receive pressure to expand the sewer district and provide service to this relatively dense residential area.

The wastewater treatment plant is located within the LWRA, on a 40-acre tract of land in the southwest corner of the intersection of Lower Lake Road and Quaker Road. The treatment plant discharges directly into Lake Ontario from an outfall approximately 1,500 feet into the lake from a point situated at the east of Camp Kenan.

According to the Town of Somerset Comprehensive Plan, October 2002, the sewage treatment system has sufficient surplus capacity to meet the projected population growth through the year 2025. The current SPDES permit is valid until June 2006. The plant has a design capacity of 278,000 gallons per day. It currently is operating at 110,000 gallons per day with seasonal fluctuations to over 200,000 gallons per day. There is an on-going project to improve aeration in the lagoons, but otherwise there are not operational problems effecting effluent quality. Future development within the LWRA should be directed to occur within the existing sewer service area.

### 3. Stormwater

The Town of Somerset does not have a closed drainage system. Stormwater is conveyed through open ditches. The Village of Barker stormwater sewer system contains four independent tile systems, which deliver the surface water to open drainage ways and then to Golden Hill Creek, or directly to the creek. The Village system has been operational since its inception in the early 1900's. However, areas of more recent development and areas adjacent to the Village have not yet been included in the Village's storm drainage system and continue to utilize open ditches. All of the stormwater collected within the Village and southern portions of Town eventually drains through the LWRA via a system of roadside ditches that drain to the creeks which discharge to Lake Ontario.

Because of proper highway construction and an annual program to maintain and clean ditches, storm water runoff has not become a major problem in the Town in general, nor in the LWRP in particular. This program has successfully minimized flood conditions and has helped to maintain the viability of active farmland. Efforts

must be continued to keep roadside ditches and culverts open and free from growth and debris. Further more, drainage considerations must be included in all development proposals.

#### 4. Solid Waste Disposal

The Town contracts with private solid waste haulers for solid waste collection. Refuse collection and disposal is arranged through the Niagara County Solid Waste Consortium, which provides options to bid refuse collection and disposal services jointly with other Towns. Waste collection and disposal is contracted with American Refuel until 2008. Current contractual arrangements provide for collection and disposal, recycled material collection and disposal, and the disposal of large items and white goods on a weekly basis. The Town also arranges for an annual curbside tire pickup by Town work forces and disposal by private contract.

Agrilink Comstock Michigan Fruit and Mayer Brothers are large generators of solid waste in the Town and Village. They are able to dispose of their own organic waste on site, in a manner frequently monitored by and approved under State Health Department regulations. The AES generating station also produces large amounts of solid waste materials, which are stockpiled on site and disposed of in a regulated manner. There are no disposal facilities for municipal solid waste located within the LWRP study area.

#### 5. Transportation System

As a predominantly rural town, the Town of Somerset has a relatively simple roadway system. Lake Road (NYS Route 18) is the principal east-west route in the Town, and Quaker (NYS Route 148) is the main north-south route. Along with Niagara Orleans County Line Road (NYS Route 269), Lake Road and Quaker Road are the only State routes in Somerset. All other roadways are under local or County jurisdiction.

Lake Road is the primary east-west highway proving access to the LWRA. In the eastern half of the study area, Lower Lake Road provides access to a series of residential streets along the lake shore, including Huntington Beach Road, Lakeview Drive, Coates Road, Brown's Camp Road, Lakeshore Drive, Somerset Drive, Snell Grove Road, Haight's Park, Hass Road, and Carmen Road. With few exceptions the residential roads have one point of access onto Lower Lake Road.



Hosmer Road, Hartland Road, Quaker Road, Johnson Creek Road, Burgess Road, Carmen Road and Niagara Orleans County Line Road provide north-south access to the Somerset waterfront. Within the LWRA, Quaker Road, north of Lake Road, is a Town Road. Lovers Lane has been abandoned and is no longer maintained by the Town.

Traffic counts indicate that Route 18 (Lake Road) and Hartland Road handle the most traffic. According to 2002 NYSDOT traffic data, NYS Route 148 had 3,150 vehicles reported in the section between County Road 135, Hartland /Somerset Town Line Road and NYS Route 18. According to average daily traffic count data collected by the New York State Department of Transportation in 2002, NY Route 148 had 3150 vehicles on the section between CR 135, Hartland Somerset Town Line Road and NY Route 18. There is no indication that any roadways currently operate at a failing level of service. There are no significant traffic problems in Town in general or within the LWRA in particular.

An active rail line runs through the western end of the Town, with a spur to the AES power generating station. This spur is included in the LWRA. The railroad right-of-way continues eastward through the Town, but this portion of the rail line is in private ownership and is not in operation. There is no public transportation service in Somerset.

According to the 1998 Bicycle Master Plan prepared by the Niagara Frontier Transportation Committee (now known as the GBNRTC), there are no existing designated bicycle routes in the Town of Somerset. That plan recommends establishing a bike route along the Lake Ontario shore for the full length of Niagara County, including the Town of Somerset. In Somerset, the route is shown along Lake Road to Quaker, along Quaker to Lower Lake Road, and continuing east to the County line. The New York Seaway Trail follows Lake Road (NYS Route 18) in the vicinity of the Somerset LWRA.

## **H. Water Quality**

The New York State Department of Environmental Conservation (NYSDEC) assigns a water quality stream classification to surface waters in New York State, which identifies the best usage for that stream. Fish Creek and Golden Hill Creek are classified as Class C fresh surface waters and are not classified as protected streams. Therefore, NYSDEC does not regulate stream crossings or stormwater discharges into

these creeks. NYSDEC identifies the best usage for Class C streams as fishing and recreation. According to 6 NYCRR Part 701 Classifications - Waters and Groundwaters, Class C streams have conditions suitable for primary and secondary contact recreation (although other factors may limit their use for these purposes). These waters are suitable for game fish survival.

The creeks are the discharge points for stormwater drainage in the Town. Which is conveyed to these waterbodies through open roadside ditches and outfall pipes. Outfalls are typically considered point source locations for the introduction of pollutants carried in stormwater. Depending on the type of development present, stormwater runoff can be a source of metals, organic compounds, nutrients or other contaminants, in addition to pathogens. Measures can be implemented to reduce contaminant loadings in the effluent. This approach typically involves expensive structural devices that address a relatively small portion of the entire contributing watershed area, but can be effective for localized water quality problems. At present, there is no indication that the quality of the stormwater effluent delivered to Fish Creek and Golden Hill Creek is degraded to the extent that it would require this type of mitigation. A more feasible means of improving the quality of stormwater flows in the Town and Village, that reach Lake Ontario, would be to institute a best management approach, as discussed below.

The primary impact to water quality in the Somerset LWRA is non-point source pollution. Non-point source pollution is pollution that reaches a surface water body through unconfined or indiscrete means. Examples include stormwater sheet or overland flow (i.e. – unchanneled flow from paved surfaces, buildings and construction sites) which carries animal wastes, road oil and other automotive by-products, pesticides and fertilizer; and groundwater infiltration that can carry contaminants from faulty cesspools or septic tanks or toxins from other sources of pollution. The best way to control the rate of non-point contaminant generation and transport in upland areas is through the use of "best management practices" such as reducing fertilizer and pesticide applications, proper disposal of pet wastes, automobile waste oils, etc. and other non-structural means. This approach is relatively inexpensive as compared to the costs of employing structural measures to mitigate point source pollution. Public Education is an important means of implementing best management practices. Vessel waste discharges are another potential source of water pollution, particularly in areas where vessels are docked in higher concentrations. Due to the lack of a marina in the LWRA, vessel waste discharges have not been identified as a problem in the study area.

## **I. Topography, Geology and Soils**

Somerset is located within the Iroquois Plain, which extends from the south shore of Lake Ontario, southerly to the Niagara Escarpment. The Escarpment traverses, in an east-west direction, the Towns of Lewiston, Cambria, Lockport, and the northern part of Royalton. North of the Escarpment elevations of below 500 feet are most common. Lake Ontario itself is at an elevation of approximately 250 feet above sea level. The Town of Somerset, which lies between the Escarpment and the Lake, ranges in elevation from a high of approximately 370 feet above sea level at the south town line, near Johnson Creek Road, to a low of 250 feet at lake level within the LWRA.

The Town, overall, has an elevation difference of approximately one-foot per thousand feet (0.1 percent) throughout its north-south length, to approximately Lower Lake Road. Within the LWRA, from Lower Lake Road northward, topography recedes toward the Lake at a rate of 50 feet per 1000 feet, or 5 percent slope. Areas to the west of Quaker Road have steeper topography up to 6 to 8 percent slopes on the northern extension of Hartland Road and Lower Lake Road. Immediately adjacent to the Lake, there are bluffs of 20 to 40 feet for approximately 80 percent of the Town's lakefront. These bluffs have in the past, constrained lakefront development. The majority of lakefront residential and recreational development has encroached on the lakefront bluffs north of Lakeview Drive in an area from Quaker Road, easterly to Golden Hill State Park.

According to the Niagara County Soil Survey (USDA Soil Conservation Service, 1972), the LWRA is primarily comprised of glacial till with sandstone and limestone fragments deposited shortly after the ice age. The majority of the soil in the LWRA is comprised of Hilton silt loam, Collamer silt loam, and Rhinebeck silt loam, which is usually found parallel to the Niagara escarpment. These soils are considered valuable for raising crops.

Soils within the Town vary greatly because of their initial creation as glacial drift deposits mixed with alluvium from the prehistoric recession of Lake Ontario. Although deposits of gravel are common in glacial formations, most of the soils in Somerset are alluvial deposits of silt and are heavy textured. Silts in particular have a soil composition in which moisture cannot be retained and a tight structure through which water cannot pass. This impervious soil structure, which inhibits the absorption of moisture, can be found in many areas of the Town outside the LWRA.

The majority of soils in the Town can be agriculturally productive if they have good natural drainage or can be mechanically drained by tile lines or ditches. High soil suitability for grain crops, fruits, and some vegetables coupled with late springs and long falls (typical along Lake Ontario) combine to provide better growing conditions than in most other areas within the state. These two natural phenomena help to explain the relative stability that farming has had in the Town of Somerset.

Most of the soils in the Town will not readily accept dense urban development without the extensions of water and sewer lines, because of high water tables and impermeable soils. The existing areas of the Village and Town with sewer service contain sufficient capacity to more than accommodate the needs for future urban growth during the next ten to twenty years. Urban growth will benefit the public investments (sewer and water lines costs) if it is concentrated within the existing sewer and water district areas, in the following ways:

Permit less costly district charges and maintenance costs for landowners.

Promote a sense of community and neighborhood ties that cannot be created by scattered sprawl development along major highways.

Indirectly stabilize and enhance the area's agricultural-economy by reducing the potential of scattered residential development throughout the farming areas.

## **J. Natural Resources**

### **1. Wetlands and Habitats**

Under the New York State Freshwater Wetlands Act NYSDEC has prepared wetlands maps for the Town of Somerset, which are on file with the Town. The Town has adopted a wetland law, which is codified as Chapter 109 - Freshwater Wetlands of the Code of the Town of Somerset. The largest wetland areas in the Town are located outside the LWRA, in the southern portion of the town near the Town of Hartland.

Within the LWRA there are approximately 469 acres of federal jurisdictional wetlands, 360 acres of which are along the Lake Ontario shoreline. They primarily follow the creeks and tributaries. The Army Corps of Engineers (ACOE) regulates all activities that occur or are proposed within or near a potential wetland area. The quantity of wetlands that fall under the jurisdiction of the ACOE has been uncertain in recent

years due to litigation related to isolated wetlands. At this time, isolated wetlands (those wetlands with no apparent surface water outlet) are more vulnerable to changes in surrounding land uses because they no longer fall under the permitting authority of the Army Corps. See [Map 7 – Environmental Features](#).

As noted above, the Town of Somerset is crossed by a number of creeks, the most significant one being Golden Hill Creek, which runs through the LWRA to the its outlet into Lake Ontario. These creeks not only serve an important drainage function, but also provide attractive natural settings and offer opportunities for recreation. Golden Hill Creek and Fish Creek have experienced some salmon runs, and may have the potential to become an attraction for sport fishing.

Based upon a February 2003 review of the Natural Heritage Program databases, the NYSDEC Division of Fish, Wildlife & Marine Resources has reported that there are no records of rare or state-listed animals or plants, significant natural communities, or other significant habitats occurring within the LWRA boundary.

According to the Upstate New York Groundwater Management Program report of the NYSDEC, no Primary or Principal Aquifers underlie the study area.

## 2. Fish and Wildlife

According to a search of records by the New York State Department of State, Division of Coastal Resources, Coastal Habitats Unit, conducted in January 2003, no Significant Coastal Fish and Wildlife Habitat narratives or maps have been prepared for the Town of Somerset.

Salmon, Lake Trout, Rainbow Trout, and Brown Trout can be found within the western section of the Lake Ontario Shoreline. The eastern area surrounding Golden Hill State Park and the Thirty-mile Point Lighthouse are popular perch, bullhead, salmon, rainbow trout, and brown trout fishing areas. Fish Creek and Golden Hill Creek also include collections of rainbow and brown trout.

## **K. Flooding and Erosion**

### **1. Flooding**

On February 3, 1982, the Federal Emergency Management Agency (FEMA) released the Flood Insurance Rate Maps (FIRM) for the Town of Somerset. The LWRA is covered by Community Panel Numbers: 360512 0005 B and 360512 0010 B. The FIRM maps delineate the final flood hazard boundaries which provide the basis for the implementation of the regular program phase of the National Flood Insurance Program within the Town. Within the LWRA the flood hazard areas (100-year floodplains) include the immediate Lake Ontario shoreline; a 100 to 400 foot wide corridor along Golden Hill Creek and a 250 to 400 foot wide corridor along Fish Creek to its outlet.

In order for property owners to take advantage of the National Flood Insurance Program (NFIP), the Town Board has adopted federally approved floodplain management regulations to manage land use and development within the designated flood hazard areas (Chapter 104 of the Town Code). Flood hazard regulations were developed as part of the Town's Coastal Energy Impact Program and incorporated into the Town's zoning ordinance. Property owners within designated flood hazard areas are eligible to receive federal flood insurance and federally insured mortgage money is available to buyers.

The flood zones are established based upon the degree to which an area is susceptible to flood damage. The two general flood zones that exist within the Town of Somerset are:

"A" and "AE" Zones – (also called the special flood hazard area) is that area of land that would primarily experience still water flooding, without significant wave activity, during the 100-year storm. In Zone A no Base Flood Elevations or depths are shown, while in Zone AE Base Flood Elevations have been derived and are shown on the maps;

"C" Zone – areas of minimal flooding.

The entire shoreline up to an elevation of approximately 249 above mean sea level (msl) is located within the A1 Zone. The special flood hazard area Fish Creek is in the A3 Zone and has base flood elevations ranging from 249 to 265 above msl. Golden Hill Creek, north of Lower Lake Road, is also located in the A3 Zone and has base

flood elevations from 266 to 273 above msl. Because the Golden Hill State Park is outside the Somerset Corporate limits, Golden Hill Creek within the park and its outlet are not regulated by the NFIP and, therefore, base flood elevations are not available for this downstream segment. These natural flood zones, or plains, are relatively flat areas that surround streams and are periodically inundated with water due to overbank flow. Most of the land area in the LWRA is designated as C Zone.

Development in the floodplain in the Town of Somerset is regulated under Chapter 104 – Flood Damage Prevention of the Code of the Town of Somerset. This law is designed to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas, as designated on the Flood Insurance Rate Maps. Within the regulatory floodplain, Floodplain Development Permits are required for certain construction activities within the Regulated Floodway and Special Flood Hazard Area (Zones A and AE). Pursuant to Chapter 104, any development action proposed within the Special Flood Hazard Area requires review and possibly a permit from the Code Enforcement Officer, who is the designated Local Administrator of the Flood Damage Prevention Law.

## 2. Erosion

On December 27, 1988, the New York State Department of Conservation issued Coastal Erosion Hazard Area (CEHA) maps for the Town of Somerset, pursuant to Environmental Conservation Law Article 34. The CEHA maps delineate the boundaries of the areas subject to regulation under the 6 NYCRR Part 505 Coastal Erosion Management Regulations, which establish requirements for permitting, construction and other activities within these areas. Although communities have the option of adopting locally administered coastal erosion management regulations, at this time the Town does not choose to assume the responsibility for issuing coastal erosion management permits.

Under the State's coastal management oversight, only portions of the Town of Somerset shoreline are classified by the New York State Department of Environmental Conservation as a "Natural Protective Feature Area" or a "Structural Hazard Area" (See [Map 7 – Environmental Features](#)). The shoreline from the westerly Town line to a point approximately 650 feet west of Quaker Road is designated as a "Natural Protective Feature" area. A second Natural Protective Feature area begins along the shoreline of Golden Hill State Park, at a point approximately 1,300 feet west of County

Line Road and extends eastward. This area is also a designated Structural Hazard Area.

Portions of the shoreline have been armored with rock rip-rap and concrete seawalls to prevent shoreline erosion. Seawalls can be found along the base of the bluffs and the seaward extent of many shoreline residential properties in the central portion of the study the area.

#### **L. Environmental Hazards and Constraints**

In research conducted for the Town of Somerset Comprehensive Plan, October 2002, it was determined that there are no known inactive hazardous waste sites within the LWRA.

#### **M. Summary of Assets, Issues and Opportunities**

##### **Assets:**

While the overall population and number of households has continued to grow, the Town's rural community character and agricultural base has remained stable.

The number of farms in operation in the Town has remained essentially stable since 1992.

The Village and State Parks (including Thirty-Mile Lighthouse) provide access and recreational opportunities on the waterfront.

The New York Seaway Trail follows Lake Road (NYS Route 18) in the vicinity of the Somerset LWRA. This designated National Scenic By-way is promoted as a tourism destination.

Most of the LWRA is served by public sewers.

Soils are considered valuable for raising crops.

Significant scenic views are available of Lake Ontario from many locations along the waterfront

##### **Issues:**

While the industrial and commercial properties are limited in number, they account for a significant amount of land area.



The camps and campgrounds represent less intensive uses than their commercial designation implies. Because the active campground areas do not cover the entire parcel and are not intensively developed, they may be subject to development pressures.

AES Somerset power plant occupies a significant length of shoreline, over 1/4 of the study area.

There are approximately 85 vacant parcels in the LWRP study area, consisting of 1,169 acres that represent lands available for future development.

There are approximately 50 residential vacant in-fill lots along waterfront in the RLS Lake Shore Residential District.

There are several large vacant properties that may be susceptible to future subdivision and residential development, including large undeveloped properties west of AES.

Development pressures may also increase on agricultural lands within the sewer district.

Although there is shoreline protection along some residential reaches, some of the existing erosion protection structures are in various states of disrepair.

Waterfront access is limited to two points of public access at the Village's Barker Bicentennial Park and Golden Hill State Park.

Public sewer service is not provided to some dense areas of residential development. In the future, as older on-site subsurface waste disposal systems fail and newer in-fill development occurs, the Town will continue to receive pressure to expand the sewer district and provide service to this relatively dense residential area. However, as sewer service is expanded development pressures may also increase.

The primary potential impact to water quality is non-point source pollution.

Air quality at AES Somerset power generating station

Protection of AES as a water-dependent use

Protection of wetlands and habitats

State Park and WWTP are not included in the surrounding zoning district

Potential loss and reuse of Agrilink facility

Erosion of steep banks.

There are no marinas or permanent docks within the LWRA primarily due to a combination of factors including, steep bluffs and bottom conditions. It is not anticipated that local demand will increase to a level justifying the effort to overcome the physical obstacles to establishing marina facilities within the LWRA, nor is it warranted to plan for the same.

There are no ferries for transportation or recreational purposes operating out of the Somerset LWRA. Due to numerous reasons including the lack of on-shore infrastructure and offshore physical conditions the location of a ferry terminal is not warranted, nor is it compatible with the character of the Somerset Community. The lack of a natural harbor dictates a public capital investment and potential environmental impacts that do not justify the planning for such a facility.

#### Opportunities:

The campgrounds offer an opportunity to preserve relatively large and undeveloped areas of open space along the waterfront.

Creeks and their banks remain in relatively natural condition.

Undeveloped lands along lake shore offer future opportunities for public access.

The AES multiple use plan is in place to provide for the future recreational needs of the community (approximately 30 acres).

There is capacity at the WWTP to direct future development within the LWRA to occur within the existing sewer service area.

Creeks in the LWRA not only serve an important drainage function, but also provide attractive natural settings and offer opportunities for recreation.

In January 2003, in response to a request from the Niagara County Environmental Management Council, the Somerset Planning Board recommended the following area's within the LWRA for inclusion on Niagara County's list of lands to be considered for open space protection:

The multi-use area at the northeast edge of the AES Power Plant property as the area that can be developed into parkland along the Lake Ontario shoreline.

The Salt Springs located on Quaker Road. The area was used by the Native American Indian and has historic significance.

Lover's Lane north of the Creek. This area has a ravine and is in a floodplain.

Brown's Camp and Haight's Park. Both of these camps have considerable frontage along Lake Ontario and acreage that could be utilized as parkland. Open lakefront of 200 plus acres with 4,000' frontage on Lake Ontario on the west end of the Town.