SECTION I Waterfront Revitalization Area Boundary

1.1 Existing Waterfront Revitalization Area Boundary

The existing Waterfront Revitalization Area (WRA) for the Town of Kendall, Town of Yates and Town of Carlton Local Waterfront Revitalization Program, which was established in 1998, represented a revision of the New York State Coastal Management Program) boundary. The existing WRA includes lands located along Lake Ontario and extends inland to include significant creek corridors within the Towns that provide for water-related activities and are tributary to the Lake. This enables the coordination and accommodation of planning for both critical natural resources that attract use and the uses that capitalize on those resources within the WRA. The boundary is large enough to manage resources and ensure a reasonable relationship with the shoreline. The existing WRA boundary is delineated as follows:

1.1.1. Upland WRA Boundary

Beginning at the mean high-water line of Lake Ontario, at the municipal boundary between Niagara County and Orleans County, and heading south along this boundary line to West Lake Shore Road. Then heading east along West Lake Shore Road in the Town of Yates to the intersection with NY State Route 63 (North Lyndonville Road); then heading south along NY State Route 63 to East Lake Shore Road. Then heading east along East Lake Shore Road to the intersection with Foss Road. Then heading south along Foss Road for a distance of 3,600 feet to the boundary between tax parcels 3-1-32 and 3-1-36 and turning east to follow this boundary to its intersection with the boundary between tax parcels 3-1-36 and 3-1-33. Then heading south along this boundary and continuing south along the extension of this boundary line to NY State Route 18 (Roosevelt Hwy.). Then proceeding east along NY State Route 18 for a distance of 2,270 feet to the boundary between tax parcels 15-1-3 and 15-1-4; then heading north along this boundary to the boundary between tax parcels 15-1-4 and 15-1-2. Then proceeding east along this boundary and continuing east along an extension of this boundary to the boundary between tax parcels 4-1-15 and 4-1-14; then heading north along this boundary to East Lake Shore Road. The boundary then proceeds east along East Lake Shore Road to the municipal boundary between the Town of Yates and the Town of Carlton.

The boundary continues east along East Lake Shore Road in the Town of Carlton to the intersection with Lakeside Road, which is located immediately west of the western boundary of Lakeside Beach State Park. Then proceeding south along the State Park boundary to the point where it intersects with the boundary of the 100-year floodplain on the north side of Johnson Creek (or to a point located a measured distance of 100 feet from the creek, whichever is greater). Then heading in a southwesterly direction along this line to the point where it intersects with

Church Street. Then proceeding southwest along Church Street to the intersection with NY State Route 18; then heading southwest along NY State Route 18 to where it intersects with Yates Carlton Town Line Road and the boundary of the 100-year floodplain on the north side of Johnson Creek. Then following the boundary of the 100-year floodplain along the north side of Johnson Creek (or a point located a measured distance of 100 feet from the creek, whichever is greater) in a southwesterly direction to the northern boundary of the Village of Lyndonville.

Then heading east along this municipal boundary to the point where it intersections with the boundary of the 100-year floodplain on the southeast side of Johnson Creek (or a point located a measured distance of 100 feet from the creek, whichever is greater). Then proceeding in a northeasterly direction along this line (excluding the tributaries), into the Town of Carlton, to the intersection with NYS Route 18; then heading east, and then southeast along NY State Route 18 to the point where it intersects with the boundary of the 100-year floodplain along the west side of Oak Orchard River (or a point located a measured distance of 100 feet from the river, whichever is greater). Then proceeding in a south, then southwesterly direction along this line, following the northern side of the creek, to the intersection with Clarks Mills Road; then heading south along Clarks Mills Road to a point of intersection with the boundary of the former Penn Central railroad corridor. Then following the northern boundary of this railroad right-of-way to the to the point of intersection with Park Avenue; then proceeding generally north and then east along Park Avenue its intersection with NY State Route 98 (Oak Orchard Road). Then proceeding north along NYS Route 98 to the point where it intersects with the boundary of the 100-year floodplain along the south side of Marsh Creek (or a point located a measured distance of 100 feet from the creek, whichever is greater). Then proceeding in an easterly direction to Bill's Road; then heading north along Bill's Road to its intersection with Marsh Creek Road. Then proceeding west along Marsh Creek Road to a point located 250 feet east of NY State Route 98; then heading north along this line, at a distance of 250 feet east of NY State Route 98 (Point Breeze Road) to the intersection with Lake Ontario State Parkway. Then proceeding east and northeast along the south side of Lake Ontario State Parkway to a point that represents a westerly extension of the boundary between tax parcels 8-1-30.1 and 8-1-29.1 and then east along this line and between the tax parcels to the intersection with the boundary between tax parcels 8-1-30.1 and 8-1-5.11. Then proceeding to the north along this parcel boundary to Lake Shore Road; then crossing Lake Shore Road and continuing to the north to the intersection with the south side of Lake Ontario Parkway. Then proceeding east along the south side of Lake Ontario Parkway to the municipal boundary between the Town of Carlton and the Town of Kendall.

Then following the south side of Lake Ontario Parkway, into the Town of Kendall, in an easterly direction to a point located 500 feet west of the intersection with NY State Route 237; then heading south along this line 500 feet west of NY State Route 237 and parallel to this roadway, to a point located 500 feet south of Lake Shore Road. The proceeding to the east along a line located

500 feet south and parallel to Lake Shore Road and its easterly extension to a point located 500 feet east of NY State Route 237; then heading north along a line located 500 feet east of and parallel to NY Route 237 to the intersection with the south side of Lake Ontario State Parkway. Then proceeding in an easterly direction along the south side of Lake Ontario Parkway to a point located 200 feet west of NY State Route 272 (Monroe Orleans County Line Road); then heading south along a line located 200 feet west and parallel to NY State Route 272 to a point located 200 feet south of Lake Shore Road. Then proceeding east along a line located 200 feet south and parallel to Lake Shore Road to the intersection with NY State Route 272. Then proceeding north along NY State Route 272 to the mean high-water line of Lake Ontario.

The WRA boundary also includes a separate area in the Town of Kendall that begins at the intersection of the west side of NY State Route 272 (Monroe Orleans County Line Road) and Creek Road; then proceeding in a southwesterly direction along the southern right-of-way of Creek Road to the intersection with the municipal boundary between the Town of Kendall and the Town of Murray. Then proceeding east along this boundary to the intersection with the boundary of the 100-year floodplain on the southeast side of Sandy Creek (or a point located a measured distance of 100 feet from the creek, whichever is greater); then heading in a northeasterly direction along this line to the place where it intersects with NY State Route 272. Then heading north along the west side of NYS Route 272 to the point of beginning.

1.1.2 Waterside WRA Boundary

The waterside boundary of the Towns of Kendall, Yates and Carlton WRA coincides with the mean high landward line along Lake Ontario (248.8 feet above sea level – International Great Lakes datum) from the Town of Yates westward municipal boundary with Niagara County, east to the eastern municipal boundary of the Town of Kendall with Monroe County.

1.2 Proposed Waterfront Revitalization Area (WRA) Boundary

The boundary for the Kendall-Yates-Carlton Waterfront Revitalization Area (WRA) has been expanded to include the waters of Johnson Creek that flow into the Village of Lyndonville and additional portions of Oak Orchard Creek, including Lake Alice. It also includes important viewshed corridors in the Town of Yates. The revised Kendall-Yates-Carlton-Lyndonville WRA boundary shall encompass all the land and water area as described below.

1.2.1 Upland Boundary of the WRA

The upland boundary for the Kendall-Yates-Carlton-Lyndonville WRA is split into three distinct sub-areas that represent the three townships and the Village of Lyndonville, which comprise the entire waterfront revitalization area. These sub-areas are described as follows.

- **Sub-Area 1: Town of Yates and Village of Lyndonville (Map 1A)**

  Beginning at the mean high-water line of Lake Ontario, at the municipal boundary between Niagara County and Orleans County, and heading south along the western right-of-way line of County Line Road to its intersection with Roosevelt Highway (NY State Route 18); then heading east along the northern right-of-way line of Roosevelt Highway to the point of intersection with the eastern right-of-way of County Line Road. Then proceeding north along the eastern right-of-way of County Line Road to the intersection with West Lake Shore Road. Then heading east along West Lake Shore Road, into the Town of Yates, to the intersection with NY State Route 63 (North Lyndonville Road). Then heading south along the western right-of-way line of NY State Route 63 to its intersection with Roosevelt Highway (NY State Route 18) to the intersection with a Village-owned property (tax parcel 24.16-1-20.2) located at the eastern end of Patterson Pond (at Patterson Pond Dam).

  Then proceeding along the northern boundary of this Village-owned parcel to intersect with the boundary of the 100-year floodplain (or a point located a measured distance of 100 feet from the northern shoreline of Patterson Pond, whichever is greater), and following this boundary to the west, along the north side of Patterson Pond, to the intersection with the western boundary of the Village of Lyndonville. Then proceeding south along the Village boundary to the point of intersection with the boundary of the 100-year floodplain (or a point located a measured distance of 100 feet from the shoreline of Patterson Pond, whichever is greater); then proceeding in an easterly direction along this boundary (and the south side of Patterson Pond) to the point of intersection with the western boundary of tax parcel 24.6-1-29.2; the following the perimeter boundary of tax parcel 24.16-1-29 to the intersection with the boundary of the 100-year floodplain (or a point located a measured distance of 100 feet from the shoreline of Patterson Pond, whichever is greater); then proceeding in an easterly direction along this boundary to the intersection with the southern boundary of tax parcel 24.16-1-25 (location of Yates Town Hall). Then proceeding east along this boundary to the western right-of-way of Main Street; then following this right-of-way boundary north to the intersection with the boundary of the 100-year floodplain of Johnson Creek (or a point located a measured distance of 100 feet from the southeastern shoreline of the creek, whichever is greater); then proceeding in an easterly and northeasterly direction along this boundary and along the southeast side of Johnson Creek, to the northern boundary of the Village of Lyndonville.

  Then proceeding to the west, following the northern boundary of the Village to the intersection with the boundary of the 100-year floodplain along the western side of Johnson Creek (or a point located a measured distance of 100 feet from the creek, whichever is greater). Then following this boundary to the point of intersection with the eastern boundary of lands owned by the Village of Lyndonville (tax parcels 25.9-1-5, 25.9-1-6, 25.13-1-86.2

and 25.13-1-86.111), which encompass the open space that provides public access to Johnson Creek, the Village of Lyndonville Wastewater Treatment Plant and other Village facilities. Then proceeding south from the eastern end of tax parcel 25.13-1-86.111 along the boundary of the 100-year floodplain (or a point located a measured distance of 100 feet from the creek, whichever is greater) on the western side of Johnson Creek, to the intersection with the eastern right-of-way of Main Street (NY State Route 63).

Then heading north along the eastern right-of-way of NY State Route 63 to the point of intersection with East Lake Shore Road. Then proceeding east along East Lake Shore Road to the intersection with the western right-of-way of Morrison Road. Then proceeding south along the western right-of-way of Morrison Road to its intersection with Roosevelt Highway (NY State Route 18); then heading east along the northern right-of-way of Roosevelt Highway to the point of intersection with the eastern right-of-way of Morrison Road. Then proceeding north along the eastern right-of-way of Morrison Road to the point of intersection with East Lake Shore Road; then following East Lake Shore Road to the east to the intersection with municipal boundary between the Town of Yates and the Town of Carlton.

- **Sub-Areas 2: Town of Carlton (Map 1B)** Beginning at the municipal boundary between the Town of Yates and the Town of Carlton, the boundary continues east along East Lake Shore Road, into the Town of Carlton, to the intersection with Lakeside Road, which is located immediately west of the western boundary of Lakeside Beach State Park. Then proceeding south along the State Park boundary to the point where it intersects with the boundary of the 100-year floodplain on the north side of Johnson Creek (or to a point located a measured distance of 100 feet from the creek, whichever is greater). Then heading in a southwesterly direction along this line to the point where it intersects with Church Street. Then proceeding southwest along Church Street to the intersection with NY State Route 18; then heading southwest along NY State Route 18 to where it intersects with Yates Carlton Town Line Road and the boundary of the 100-year floodplain on the north side of Johnson Creek. Then following the boundary of the 100-year floodplain along the north side of Johnson Creek (or a point located a measured distance of 100 feet from the creek, whichever is greater) in a southwesterly direction to the northern boundary of the Village of Lyndonville.

  Then proceeding east along the northern boundary of the Village of Lyndonville to the boundary of the 100-year floodplain on the southeast side of Johnson Creek (or a point located a measured distance of 100 feet from the creek, whichever is greater). Then proceeding in a northeasterly direction along this boundary line (excluding the creek tributaries), back into the Town of Carlton, to the intersection with NY State Route 18; then heading east and then southeast along NY State Route 18 to the point where it intersects with

the boundary of the 100-year floodplain of Oak Orchard River (or a point located a measured distance of 100 feet from the west side of the river, whichever is greater). Then proceeding in a south, then southwesterly direction along this line, following the northern side of the creek, to the intersection with Clarks Mills Road; then heading south along Clarks Mills Road to a point of intersection with Waterport Road. Then heading west along Waterport Road to the intersection of Waterport Road and Oak Orchard River Road; then continuing west and southwest along Oak Orchard River Road to the municipal boundary between the Town of Carlton and the Town of Gaines. Then following this municipal boundary to the east to the intersection with the boundary of the 100-year floodplain along the southeast side of Oak Orchard Creek (or to a point located a measured distance of 100 feet from the southeast side of the creek, whichever is greater). Then proceeding along this line in an easterly direction to the west side of Otter Creek; then heading generally south along the boundary of the 100-year floodplain (or at a measured distance of 100 feet from the western shoreline of the creek, whichever is greater) to the intersection with the west side of Waterport Road. Then proceeding north along the western right-of-way of Waterport Road to the boundary of the 100-year floodplain (or to a point located a measured distance of 100 feet from the eastern shoreline of the creek, whichever is greater); then following this line to its intersection with the boundary of the 100-year floodplain along the southern shoreline of Lake Alice (or to a point located a measured distance of 100 feet from the shoreline of the lake, whichever is greater). Then proceeding in a northeasterly direction along the southern shoreline of Lake Alice to the intersection with the access road to the Lake Alice Dam; then heading east along this roadway to its intersection with the western right-of-way of Park Avenue. Then heading north along the western right-of-way of Park Avenue and continuing north along the right-of-way of the Park Avenue extension; then continuing north beyond the Park Road Extension following at measured distance of 100 feet from the top of southern bank of Oak Orchard Creek. Then continuing along the southern shoreline of Oak Orchard Creek, following the boundary of the 100-year floodplain or at a measured distance of 100 feet from the top of the bank or shoreline to the western boundary of tax parcel 17-1-23.11 (Riverview Campground and Marina at Shipman Point). Then following the perimeter of tax parcel 17-1-23.11 to the intersection with the boundary of the 100-year flood plain or to a point located a measured distance of 100 feet from the shoreline of Oak Orchard Creek; then following the southern shoreline of the creek in a northeasterly direction to the intersection with the southwestern right-of-way of NY State Route 18 (Roosevelt Highway).

Then heading southeast along the right-of-way of NY State Route 18 to the intersection with NY State Route 98 (Oak Orchard Road); then heading north along NY State Route 98 to the intersection with the boundary of the 100-year floodplain of the southern shoreline Marsh Creek (or to a point located 100 feet from the creek). Then proceeding east following the 100-year floodplain boundary or at a measured distance of 100 feet from the south shore of Marsh

Creek, whichever is greater, to the intersection with western right-of-way of Bills Road. Then proceeding north along the western right-of-way of Bills Road to the intersection with the boundary of the 100-year flood plain (or a point located a measured distance of 100 feet from the northern shoreline of Marsh Creek, whichever is greater); then heading west along the 100-year floodplain or at a measured distance of 100 feet from the northern shoreline to the intersection with a point located 250 feet east of NY State Route 98; then heading north along this line, at a distance of 250 feet east of NY State Route 98 (Point Breeze Road) to the intersection with Lake Ontario State Parkway. Then proceeding east and northeast along the southern right-of-way of Lake Ontario State Parkway to a point that represents a westerly extension of the boundary between tax parcels 8-1-30.1 and 8-1-29.1 and then east along this line and between the tax parcels to the intersection with the boundary between tax parcels 8-1-30.1 and 8-1-5.11. Then proceeding to the north along this parcel boundary to Lake Shore Road; then crossing Lake Shore Road and continuing to the north to the intersection with the south side of Lake Ontario Parkway. Then proceeding east along the south side of Lake Ontario Parkway to the municipal boundary between the Town of Carlton and the Town of Kendall.

- **Sub-Area 3: Town of Kendall (Map 1C)**

  Beginning at the municipal boundary between the Town of Carlton and the Town of Kendall and then following the south side of Lake Ontario Parkway, into the Town of Kendall, in an easterly direction to a point located 500 feet west of the intersection with NY State Route 237; then heading south along this line 500 feet west of NY State Route 237 and parallel to this roadway, to a point located 500 feet south of Lake Shore Road. The proceeding to the east along a line located 500 feet south and parallel to Lake Shore Road and its easterly extension to a point located 500 feet east of NY State Route 237; then heading north along a line located 500 feet east of and parallel to NY Route 237 to the intersection with the south side of Lake Ontario State Parkway. Then proceeding in an easterly direction along the south side of Lake Ontario Parkway to a point located 200 feet west of NY State Route 272 (Monroe Orleans County Line Road); then heading south along a line located 200 feet west and parallel to NY State Route 272 to a point located 200 feet south of Lake Shore Road. Then proceeding east along a line located 200 feet south and parallel to Lake Shore Road to the intersection with NY State Route 272. Then proceeding north along NY State Route 272 to the mean high-water line of Lake Ontario.

  The WRA boundary also includes a separate area in the Town of Kendall that begins at the intersection of the west side of NY State Route 272 (Monroe Orleans County Line Road) and Creek Road; then proceeding in a southwesterly direction along the southern right-of-way of Creek Road to the intersection with the municipal boundary between the Town of Kendall and the Town of Murray. Then proceeding east along this boundary to the intersection with

the boundary of the 100-year floodplain on the southeast side of Sandy Creek (or a point located a measured distance of 100 feet from the creek, whichever is greater); then heading in a northeasterly direction along this line to the place where it intersects with NY State Route 272. Then heading north along the west side of NYS Route 272 to the point of beginning.

1.2.2 Waterside Boundary of the WRA

The waterside boundary for the WRA begins at the intersection of the municipal boundary between the Town of Somerset (Niagara County) and the Town of Yates at the mean high waterline of Lake Ontario. The waterside boundary then proceeds to the north along the municipal boundary of the Town of Yates, and over the surface waters of Lake Ontario, for a measured distance of 1,500 feet. The boundary then turns to the east, continuing and paralleling the shoreline at a measured distance of 1,500 to a point where it intersects with the western municipal boundary between the Town of Kendall and Town of Hamlin (Monroe County); then proceeding due south along this municipal boundary line to the mean high waterline of Lake Ontario.

1.3 Description and Rationale for Modifications to the WRA

The Kendall-Yates-Carlton-Lyndonville Waterfront Revitalization Area boundary has been revised to more effectively manage and protect cultural and environmental resources and promote and plan for recreational tourism along the waterfront.

1.3.1 Modifications to the Upland Boundary of the WRA

- **Town of Yates and Village of Lyndonville (Sub-Area 1)**

  The existing WRA boundary in Sub-Area 1 has been modified to incorporate view corridors along County Line Road, NY State Route 63 (North Lyndonville Road) and Morrison Road, as well as the inclusion of the Johnson Creek waterfront and Patterson Pond in the Village of Lyndonville. As the topography of the Town increases as you move inland, County Line Road, NY State Route 63 (North Lyndonville Road) and Morrison Road are considered important corridors that provide scenic views of Lake Ontario, as well as potential locations for multi-use trail connections between Roosevelt Highway (NY State Route 18), which is the location of the New York State Great Lakes Seaway Trail, and waterfront resources along Lake Ontario. NY State Route 63 also provides a direct connection between the Village of Lyndonville and the Lake Ontario shoreline, where the former Yates Pier is located. This is a location of proposed parkland improvements (as discussed in Section IV).

  The WRA in the Town of Yates has also been modified to remove approximately 800 acres of land located south of Lake Shore Road and to the east and west of Morrison Road

(formerly known as the Morrison Site). These lands, which were owned by New York State Electric and Gas Company (NYSEG), had originally been included in the WRA because of their potential for use in connection with the development of a power plant along Lake Ontario in this vicinity. In the 1960's, NYSEG began assembling parcels of land in the Town of Yates (and neighboring Town of Somerset to the west) for the purpose of constructing a nuclear power plant. Under the Public Service Commission Article XII proceeding, NYSEG had to select and acquire land for a preferred site (Somerset) and an alternate site (Yates) for siting this plant. After numerous setbacks and complications, a coal fired power plant was constructed in the Town of Somerset. Unable to market the land for a multi-use development, the Morrison Site remained vacant and unused. These lands have since been sold into private ownership; some of the land is actively farmed and other acreage remains vacant open space. With no direct relationship to the waterfront and being in private ownership, these lands were removed from the WRA.

Additionally, as shown on Map 1A, the boundary of the WRA in Sub-Area 1 has been extended into the Village of Lyndonville, beyond the view corridor along NY State Route 63, to include the Patterson Pond area and portions of the Johnson Creek corridor. Patterson Pond is the site of a cement dam that was built in 1947 to replace a deteriorated dam that was once used in association with a flour mill. The dam is a popular location for shoreline fishing and the pond offers opportunities for public access and recreation. During the spring, salmon are constrained by the dam in their quest to reach the upper reaches of Johnson Creek. In addition to the fishing opportunities this offers, the idea of providing a fish ladder to support fish migration is an option for this area. The WRA in Lyndonville also includes a number of Village owned properties along Johnson Creek that provide open space and fishing access and a location for the Village's wastewater treatment plant. The Village also owns a small number of parcels on Patterson Pond, including one at spans the dam and another that is used informally for parkland along the southern shoreline of the Pond. Because Patterson Pond and Johnson Creek are important recreational and natural resources in the Village of Lyndonville, this area has been included as a part of the WRA.

- **Town of Carlton (Sub-Area 2)**

  The WRA boundary in the Town of Carlton has been modified to include Lake Alice and the westerly section of the Oak Orchard Creek corridor. The existing WRA boundary follows Oak Orchard Creek, but did not extend beyond the Oak Orchard Dam, which is located at the northern outlet of Lake Alice. Lake Alice (also known as Waterport Pond) is a large waterbody located east of Waterport hamlet. It is a reservoir for water flow through the Oak Orchard Dam and power generation at the Waterport hydro-electric power station. Lake Alice and the upper reaches of Oak Orchard Creek offer a variety of opportunities for recreational boating and fishing. These surface waters also support numerous species of fish and wildlife.

For these reasons, Lake Alice and the upper extent of Oak Orchard Creek have been included in the WRA.

The WRA boundary, east of Oak Orchard Dam has been reduced in coverage to remove farmland and uses not associated with Oak Orchard Creek. The boundary was shifted away from Park Avenue to follow the floodplain boundaries along the southern shoreline of the creek. The properties that are utilized as a parking area for the shoreline fishing site and the Riverview Campground and Marina have been kept within the boundary as they are, or they support, water-dependent uses along Oak Orchard Creek.

SECTION II Inventory and Analysis

The Town of Kendall, Yates and Carlton and the Village of Lyndonville are located in Orleans County and have extensive areas of waterfront along Lake Ontario, Johnson Creek, Marsh Creek, Oak Orchard Creek and Sandy Creek. The lake and creek shoreline areas are distinctly different, yet they possess an abundance of natural resources and provide for a variety of water-related activities. Much of the waterfront area, particularly along Lake Ontario, is well-established with residential uses. These areas have retained a rural character that is enhanced by their shoreline locations. With limited areas of public land, the Towns and Village desire to provide or improve opportunities for public access to the greatest extent possible. Enhancing and expanding opportunities for recreational tourism is also of utmost importance. This update to the Kendall-Yates-Carlton Local Waterfront Revitalization Program, which now includes the Village of Lyndonville, is aimed at improving the quality of life in the waterfront revitalization area, taking advantage of existing assets along the Lake and Creeks, protecting significant natural resources and enhancing economic opportunities. The following provides an overview of the analysis of existing waterfront conditions and resources.

2.1 Summary of Issues and Opportunities in the Waterfront Revitalization Area

2.1.1 Findings

- Population for the WRA only are not available. Demographics are based on the entirety of the three Towns, including the Village.
- The population in the four communities grew between 1980 and early 2000's but has since stabilized and is now experiencing a slight decline.
- Despite stable population figures, there has been an increase in the number of households.
- Population figures reflect full-time residents, and do not account for seasonal fluctuations.
- There are large numbers of seasonal cottages, representing approximately 22% of the housing stock.
- The WRA extends over 84 miles of shoreline, including both Lake Ontario and creek corridors, encompassing approximately 8,300 acres of land.
- Carlton makes up 56% of the WRA land area, due to the presence of Oak Orchard Creek and Johnson Creek.
- The primary land use in the WRA is rural residential, which represents 39%. Agricultural uses comprise 21.5% of the WRA. Approximately 15% of the area is open space (vacant and transitional). Seasonal housing is 11% of the land area, and the remaining land is infrastructure and community services.
- Generally, there is an abundance of water-dependent or water-enhanced uses in the WRA.

- Many of these water-related uses are regional assets.
- The majority of vacant parcels (72%) are small residential building lots of one acre of less.
- The three lakeshore communities all have waterfront specific zoning districts.
- The Village of Lyndonville and Town of Yates have adopted flood hazard overlay districts.
- The Towns of Carlton and Kendall have conservation overlay districts that apply to local surface waters and significant environmental resources.
- The majority of public land and recreational amenities in the WRA are centrally located in the Town of Carlton, including Lakeside Beach State Park, Orleans County Marine Park, Oak Orchard Marine Park and Lake Ontario State Parkway.
- NYSEG is a major landowner in the Town of Yates.
- Orleans County Marine Park has had significant improvements and is a well-utilized recreation facility.
- The only public access point on Lake Alice is the boat launch of Clarks Mills Road.
- There is a wealth of private marinas within the WRA, primarily on Oak Orchard Creek.
- Johnson and Oak Orchard Creeks and Lake Alice are popular locations for motorized and non-motorized boating.
- Shoreline erosion around Lake Alice is an increasing problem due to uncontrolled boat wakes and lack of speed enforcement on the lake.
- Fishing is a significant recreational industry in the WRA and is an important component of the County's economic tourism base.
- There are four separate watersheds that drain to Lake Ontario in the WRA.
- Substantial investment is being made through the Great Lakes Restoration Initiative to address water quality, invasive species, and habitat improvement in Lake Ontario.
- The Lakewide Action and Management Plan for Lake Ontario is a bi-national strategy for protecting and restoring this water body.
- The Lake Ontario shoreline and all the creeks fall within the boundaries of the 100-year floodplain.
- Portions of the Lake Ontario shoreline are designated coastal erosion hazard areas due to the significant effects of wind and wave action resulting from severe storms, with some areas experiencing a recession rate of up to 2 inches per year.
- There are three State-designated significant coastal fish and wildlife habitats in the WRA, which include Johnson Creek, Oak Orchard/Marsh Creek and Sandy Creek.
- The Oak Orchard/Marsh Creek corridors are largely intact as undisturbed, natural areas that provide extensive habitat and recreational value.
- The WRA has a number of scenic resources and viewsheds.

- The Seaway Trail is a regional asset. It falls south of the WRA in the Town of Yates and extends along part of State Route 18 and the Lake Ontario Parkway in Carlton and Kendall. This route is also a national scenic byway.
- A portion of the Audubon Niagara Birding trail extends in the western portion of the Town of Yates.
- Outside of the Village of Lyndonville, sanitary wastewater is managed through on-site septic systems.
- There is no public transportation service in the WRA.
- Facilities for bikes and pedestrians are limited.

2.1.2 Issues and Concerns

- There are two inactive boat launch ramps on Johnson Creek.
- There are limited areas of consolidated undeveloped lands within the WRA.
- There is a limited inventory of public parkland in Yates and Kendall.
- There is a need for multi-use trails throughout the WRA.
- Lakeside Beach State Park is underutilized and lacks swimming facilities (pool and/or beach).
- There are privately owned accessory structures along Oak Orchard Creek that are deteriorated and/or abandoned.
- There is a need for more formalized locations for shoreline fishing along the creeks and Lake Alice.
- There is a need for additional boat launch sites, parking, and lodging facilities to support increasing angler activity.
- There is a need for a water use plan to manage recreational boating and other water related activities on Lake Alice.
- Improvements are needed at the Waterport dam area to better manage salmon fishing and access.
- Dredging the mouth of Johnson would improve recreational boating.
- Patterson Pond needs to be dredged to improve water quality and natural habitat.
- Non-point source pollution is a significant source of contamination affecting water quality in all local surface waters, with agricultural uses as a major contributing factor.
- There are concerns regarding adverse impacts of water withdrawals from Johnson Creek.
- Water quality affects marine resources and recreational fishing opportunities.
- Watershed management extends beyond the WRA boundary, and the four communities, and must be addressed on a regional basis.
- There are fish consumption advisories in Lake Ontario for certain species.
- Private septic systems must be properly maintained to prevent potential water quality contamination. Public education for this issue is essential.

- None of the LWRP communities have regulations to address storm drainage and non-point source pollution.
- Flooding and erosion have affected many property owners, requiring the use of shoreline hardening structures (e.g. seawalls, stone revetment).
- There is a need for continued and proper maintenance of erosion protection structures along the shoreline.
- There are limited areas for scenic viewing of the Lake.
- There are safety concerns for bicyclists and pedestrians on major roadways within the WRA.

2.1.3 Assets and Opportunities

- Sports fishing is the primary source of recreational tourism in the WRA.
- There is available vacant land near the Yates Town Park and opportunities exist to use a portion of this property for expansion of public parkland.
- There are opportunities for public improvements at the Yates Pier site in Shadigee.
- The Village of Lyndonville owns two areas of public land along Johnson Creek and Patterson Pond that provide opportunities for improved public access and recreation.
- There are a number of fishing access sites along the major creeks within the WRA that could be improved (parking and other amenities). There are also opportunities to identify additional fishing access sites.
- There are opportunities for on-road improvements to accommodate bikes and pedestrians.
- The installation of a protected fish ladder at the Waterport dam and the Lyndonville dam on Johnson Creek would enable salmon to reach Lake Alice and Patterson Pond.
- Improvements to the Bridges hamlet area could create an enhanced destination, improve access, and address public safety concerns.
- There are opportunities to improve Lakeside Beach State Park as a recreational destination through enhancements to on-site recreational amenities (i.e. swimming and camping).
- Public access improvements could be made at the terminus of Peter Smith Road on Lake Ontario.
- The Lake Ontario Parkway Feasibility Study is exploring opportunities to increase public access, reduce highway maintenance costs and improve habitat.
- Additional enhancements to state-owned Oak Orchard Marine Park, west of Point Breeze, could increase opportunities for passive recreation (bird watching, hiking, picnicking, etc.)

2.2 Regional Setting, Historic Context and Community Characteristics (Map 2)

Orleans County was established in 1824, created from land that was formerly included in Genesee County. The County is located on the south shore of Lake Ontario, and is bounded by Monroe County on the east, Niagara County on the west, and Genesee County to the south. The County is approximately mid-way between the metropolitan areas of Buffalo to the west and Rochester to the east, and despite its

rural nature, is included as part of the federally designated Rochester Standard Metropolitan Statistical Area (SMSA). The County is geographically and demographically a small county, consisting of approximately 41,600 residents within an area of 396 square miles.

The original inhabitants of the area were Algonquin Indians, who were succeeded by the Iroquois. The first non-native settlers to the County arrived in the early 1800's, with James Walsworth settling at the mouth of Oak Orchard Creek in about 1803. The first main transportation route through the County was the historic Ridge Road (Route 104), which is south of the WRA. Originally an Indian trail, and then a war route during the Revolutionary War and the War of 1812, Ridge Road connected the Genesee River Valley area to Fort Niagara in the west. Orleans County remained relatively uninhabited until the opening of the Erie Canal in the 1820's, after which the canal towns of Medina, Albion and Holley grew rapidly. The northern part of the County, however, remained predominately rural until the development of a rail line in the 1870's, approximately two miles inland from the lake. Small communities such as Lyndonville, Ashwood, Carlton Station, Kent, Kendall, and Morton grew along the rail line, and eventually, Lyndonville grew to become incorporated as a Village. The rail line strengthened agriculture by making it easier to get products to market. It also helped establish the lakeshore towns. Lakeshore resorts grew up at Shadigee, Point Breeze, Lakeside and Troutburg, with concentrations of second homes and cottages. At Shadigee, a pier was built into the lake, and cross-lake shipping and passenger service continued into the 1930's. The Depression brought an end to the shoreline resort activity until a resurgence in the 1950's and 1960's, when the area became a popular location for seasonal cottages. Population boomed between 1950 and 1960: the lakeshore towns' combined population grew by 22%, and the Town of Carlton grew by over 46% increase over the decade. In the late 1960's, Lakeside Beach State Park and the Lake Ontario State Parkway were built. While original plans for the Parkway were to connect Niagara Falls to Rochester, only the eastern portion was built, connecting Lakeside Beach State Park to Rochester.

The WRA, which encompasses the northern portion of the County, can be divided into three sections. The western area includes portions of the Town of Yates, including an area within the Village of Lyndonville. The central subarea consists of the Town of Carlton; and the eastern portion consists of lands in the Town of Kendall. Generally, the three towns of Kendall, Yates and Carlton are agricultural and rural in nature. The Village of Lyndonville serves as a regional center for the surrounding Towns, offering shopping and other services. Much of the shoreline along Lake Ontario is residential, with a mix of year-round and seasonal properties. Recreational tourism is also an important component of the area. Boating, fishing, seasonal cottages along lakeshore, Lakeside Beach State Park, Oak Orchard State Marine Park, and similar water-based recreational assets along Lake Ontario and the creeks are important to the local economy.

2.3 Overview of Coastal Resources Planning Efforts

2.3.1 Regional and Local Planning

There has been a limited number of regional plans that focus on the Orleans County area. The County prepared a County Plan that is dated, and not generally used to guide land use the region. More current regional documents, such as the Finger Lakes Regional Economic Development Strategy (Finger Lakes Forward), and the Finger Lakes Regional Sustainability Plan, address the nine-county Finger Lakes region, anchored by the City of Rochester in Monroe County. They do not provide detailed information specific to Orleans County, but do promote basic strategies. In addition, there are a few local plans that pertain to portions of the WRA.

- *Finger Lakes Forward: Annual Report*

The Finger Lakes Forward Annual Report is an economic development strategy focusing on a number of key sectors, with the goal of helping to increase employment, encourage private investment and reduce poverty in the region. Agriculture and food production is a primary industry, and tourism and arts is another targeted industry. Proposed future projects include a Greater Niagara –Finger Lakes Byways Marketing Program that would highlight tourism assets in the Orleans, Genesee, Livingston, and Wyoming County region. A major focus of economic development efforts includes place-making, innovation, and workforce development. The document recognizes the importance of tourism and the arts to the economic base of the Finger Lakes region, noting that it has a $2.9 billion economic impact on the region, and supports more than 59,000 jobs.

- *Finger Lakes Regional Sustainability Plan*

The Finger Lakes Regional Sustainability Plan addresses regional issues of sustainability. It covers a range of subject areas, including energy conservation and supply, smart growth patterns, transportation choices, water management, waste management, agriculture, housing, and economic development. The recommendations address the nine-county region and are intended to promote economic and environmental sustainability and quality of life for the region. Specific targets to measure progress toward these goals were established for each of the 10 policy areas in the Plan, which are referenced in the Finger Lakes Forward Annual Report. These include goals targeting reducing annual energy and water consumption, vehicle miles traveled, and amount of waste generated regionally.

- *Long Range Transportation Plan for the Genesee Finger Lakes Region 2040*
  The Long-Range Transportation Plan for the Genesee Finger Lakes Region sets forth regional transportation priorities and strategies. It addresses automotive, bicyclist, pedestrians, transit, freight, rail, and air transportation, and sets forth criteria for how to prioritize project funding. Its recommendations for the region are:

  - Increase safety for all users;
  - Preserve and maintain existing infrastructure and services;
  - Improve mobility for vehicles;
  - Increase frequency of existing public transportation services;
  - Add new public transportation service;
  - Enhance and expand mobility and access for bicyclists;
  - Enhance and expand connectivity and access for pedestrians;
  - Expand connectivity for freight;
  - Explore enhanced parking management options; and
  - Reduce direct and indirect energy usage.

- *Lake Ontario State Parkway Feasibility Study*
  Lake Ontario State Parkway is in need of repair and maintenance. The Orleans County Department of Planning and Development has partnered with the Towns of Carlton and Kendall, the New York State Department of Transportation, and the Genesee Transportation Council to evaluate alternative designs for the Parkway in Orleans County. The study is currently underway. The Lake Ontario State Parkway plays a role in local tourism and quality of life, connecting Lakeside Beach State Park in the County to Hamlin Beach State Park in adjoining Monroe County. It is also used as a commuting route for residents working in Monroe County. Proposed alternatives include maintaining the parkway as a four-lane, limited access roadway; creating scenic pull-offs to allow visitors better access to scenic views; and other options.

- *Western Orleans Comprehensive Plan:*
  The Western Orleans Comprehensive Plan is currently under development. This plan is a joint Comprehensive Plan for the Villages of Lyndonville and Medina, along with the three western-most Towns in the County: Ridgeway, Shelby, and Yates. The updated Comprehensive Plan will address issues of housing, land use, parks, open space and recreation, economic development, transportation, and sustainability. It will identify issues and opportunities and make recommendations to help the communities achieve their goals.

2.4 Demographics

2.4.1 Population and Household Characteristics

In 2010, there were a total of 10,287 persons living in the Towns of Kendall, Carlton, and Yates (including the Village of Lyndonville.)[1] This represents an increase of 8.15% since 1980, when the prior LWRP was written, when there were 7,653 persons living in the shoreline towns. Much of the growth occurred before 2000: between 2000 and 2010, population figures actually declined slightly, and more recent estimates from the American Community Survey suggest this trend has continued (Table 1).

Table 1 - Population Trends

	1980	1990	2000	2010	2016**
Kendall	2,388	2,769	2,838	2,724	2,669 (+/- 64)
Yates*	2,447	2,497	2,510	2,559	2,450 (+/- 49)
Carlton	2,818	2,808	2,960	2,994	2,942 (+/- 154)
Lakeshore Towns	7,653	8,074	8,308	8,277	8,061 (n/a)
Lakeshore Towns	Percent change: 1980 – 2010: 8.15%		Percent change: 2000 – 2010: -0.4%		Percent change: 2010 – 2016: -2.6%

Source: US Census Bureau

* Figures for Yates include the Village of Lyndonville

** From the American Community Survey, which is based on survey data spanning a five-year period. Figures in parentheses are the margin of error for survey data.

Median age for the population was significantly higher than reported in 1980. While the median age was reported as 29.4 years in the prior LWRP, the 2010 Census placed median age ranges from 41.0 in Kendall to 44.7 in Carlton. More current estimates from the American Community Survey suggest median age remains in the 40's for the area.

Seniors (age 65 and older) account for approximately 12% of the lakeshore towns. Children under the age of 18 make up 18.5% of the population.

Growth in number of households has exceeded population growth. This follows a national trend toward smaller households, and in particular, a growth in the number of one-person households.

[1] While the LWA encompasses only portions of the municipalities, the boundary does not correspond to US Census geography, and therefore, the demographic discussion includes the entire community.

In Kendall-Yates-Carlton, there are currently an estimated 3,194 households, which represents an increase of 6.5% since 2000 (Table 2). As noted above, the population of the three towns decreased by 2.6% over the same time frame.

Table 2 - Household Trends

	2000	2010	2016**	% Change 2000-2016
Kendall	979	1,025	1,012 (+/- 90)	3.4%
Yates*	917	972	968 (+/- 75)	5.6%
Carlton	1,103	1,190	1,214 (+/- 95)	10.0%
Lakeshore Towns	2,999	3,187	3,194 (n/a)	6.5%

Source: US Census

* Figures for Yates include the Village of Lyndonville

** From the American Community Survey, which is based on survey data spanning a five-year period. Figures in parentheses are the margin of error for survey data.

The average household size in 2010 was 2.51 persons in Carlton, 2.63 persons in Yates and 2.65 persons in Kendall. One-person households make up 16.8% of households in Kendall, 23.1% of households in Carlton, and 24.5% of households in Yates.

2.4.2 Housing

The Towns of Kendall, Yates and Carlton are characterized by a large number of seasonal cottages (Table 3). All three communities have what would be considered a high vacancy rate. However, most of the vacant units are intentionally kept vacant of seasonal, recreational, and/or occasional use. Across the three towns, nearly 22% of units are seasonal units, ranging from a low of approximately 9% in Kendall, to over 28% in Yates.

Table 3 - Housing Characteristics: Vacancy, 2010

	Total Units	Vacant Units		Seasonal Units		
		#	%	#	% Total	% Vacant Units
Kendall	1,186	161	13.3%	105	8.9%	65.2%
Yates*	1,513	541	35.8%	425	28.1%	78.6%
Carlton	1,727	537	31.1%	439	25.4%	81.8%
Lakeshore Towns	4,426	1,239	28.0%	969	21.9%	78.2%
TOTAL	8,852	2,478	28%	1,938	22%	

Owner occupancy rates range from 82.2% in Carlton, to 89.5% in Yates.

2.5 Existing Land and Water Uses (Maps 3A - 3C and Maps 4A-C)

2.5.1 Existing Land Use

The Waterfront Revitalization Area (WRA) boundary, which extends along more than 84 miles of shoreline, encompasses approximately 8,282 acres of land. This includes the shoreline areas along Lake Ontario and local creek corridors in the Towns of Yates, Carlton and Kendall and the Village of Lyndonville (Maps 3A-C and Table 4). The portion of the WRA that falls within the Town of Carlton comprises about 56% of the total land area in the WRA.

The primary land use in the WRA is rural residential, which covers 3,264 acres (39%) of the land. Seasonal housing accounts for 11% (356 acres) of the residential land and 22 percent of all housing units in the WRA. Most seasonal housing is located along the Lake Ontario shoreline in Kendall, Carlton, and Yates; much of this housing is owned by persons who reside outside of Orleans County.

Agricultural uses account for 21.5% (1,779 acres) of overall land use in the WRA. This includes field crops, fruit orchards and other agricultural uses and activities. Certain agricultural lands in the WRA are located within designated Orleans County Agricultural District No.1 (see Maps 4A-C). Another 15% of the land (1,233 acres) in the WRA is vacant or transitional in status. This includes undeveloped woodlots and fields, pastures, and other unutilized lands.

Table 4 – Existing Land Use (acres)

Land Use	Kendall	Carlton	Yates	Lyndonville	Total	Percent
Rural Residential	156.8	1,286.5	322.8	13.1	1,779.3	39.0
Agricultural	494.2	1,200.1	1,563.1	6.6	3,264.0	21.5
Recreational	16.1	767.4	5.0	14.4	803.0	10.0
Vacant/Open Space	75.6	600.7	544.9	12.0	1,233.2	15.0
Infrastructure	330.0	732.3	3.0	6.4	1,071.6	12.9
Community Services	0.1	21.0	48.7	26.0	95.8	1.2
Commercial	1.0	33.6	0.0	1.2	35.8	0.4
TOTAL	1,073.8	4,641.6	2,487.6	79.6	8,282.6	100.0

Source: Orleans County Real Property Service.

Infrastructure in the WRA includes lands occupied by water treatment and wastewater treatment facilities in the Town of Yates and Village of Lyndonville, and the Lake Ontario State Parkway that extends through the Towns of Carlton and Kendall. These uses account for over 1,071 acres or 12.9% of the WRA. Community services, which occupy almost 96 acres in the WRA, include churches, schools, libraries, and cemeteries.

Recreational uses cover over 803 acres (approximately 10%) of land in the WRA. This includes Lakeside Beach State Park and other State and County parkland in Carlton, public parkland in the Town of Yates and public parkland in the Village of Lyndonville (totaling 699.3 acres). Campgrounds, marinas and yacht clubs are also covered under this category, including Green Harbor, Riverview and Pleasant Point Campgrounds in the Town of Carlton, which account for 48.1 acres of land; and marina and yacht club facilities in the Towns of Carlton and Kendall that account for another 55.5 acres of land.

2.5.2 Water Dependent and Water-Enhanced Uses

Water dependent uses are land uses, structure and/or economic activities that require a waterfront location to function (e.g., marinas, water treatment facilities). Water-enhanced uses are land uses that receive added value or benefit due to their proximity to the shoreline (e.g., parks or restaurants). Frequently, water-enhanced uses function as support services for water dependent uses. Water dependent uses play an essential roll in determining the economic importance of the shoreline, as well as the public acceptance of its worth as a resource that requires careful planning.

- *Overview of the Shoreline*

  The Waterfront Revitalization Area (WRA) has an abundance of water dependent and water-enhanced uses, although some areas have more than others. Water dependent uses consist of marinas, public and private docks, boat launch facilities, a federal breakwater, a utility owned reservoir and dam, and water and sewage treatment plants. Water-enhanced uses include Lakeside Beach State Park and other public parklands, restaurants, and lodging. There are no goods transfer points, swimming facilities, processing plants, scientific laboratories or research facilities or other similar water dependent uses in the WRA. The following water dependent uses are found in the individual communities.

  - Yates

    Land uses along the Town of Yates shoreline consist mostly of water-enhanced private residences. The only water dependent uses in this area include the Village of Lyndonville water treatment plant and water intake in the Shadigee hamlet at the end of North Lyndonville Road. The former Yates pier site, also located at the terminus of North Lyndonville Road, and Yates Town Park (at the end of Morrison Road) are two water-enhanced uses that exist in the Town, both of which has the potential for improvement.

  - Lyndonville

    The WRA in the Village of Lyndonville includes a small number of water-enhanced uses, which consist primarily of public lands that are used for public access to Johnson Creek and

Patterson Pond. The dam at Patterson Pond was formerly used to power a mill but has not been used in this manner for many years. The Village of Lyndonville sewage treatment plant is the only water dependent use in this area of the WRA.

- Carlton

The Town of Carlton has the greatest number of water dependent uses and water-enhanced recreational facilities in the WRA. Water dependent uses include the Green Harbor Campground, which supports a private beach area and small marina with channel access to Lake Ontario; Point Breeze Harbor, which is home to a number of docks, marinas, boat launches and charter boat services, as well as the federal breakwater and navigation channel that is a popular location for shoreline fishing; Orleans County Marine Park, supports public dockage, marine police facilities (and homeland security services) and charter fishing; the Point Breeze Yacht Club; the Bridges area that is the location of private docking and boat launch facilities, including the Oak Orchard Marina; the Albion water treatment plant, which is located at the end of Wilson Road in the Town of Carlton; the Waterport hydroelectric dam at the Lake Alice reservoir in Waterport; the Archers Sportsmen Club, which offers shoreline access and fishing along Oak Orchard Creek; and Green Harbor Campground and Marina on the creek. In addition, there numerous private docks located along Oak Orchard Creek and around the Lake Alice reservoir in the Waterport area.

It should be noted that there are two in-active boat launch sites on Johnson Creek; one is a State-owned facility located within Lakeside Beach State Park and the other is a private launch in the Kuckville area in the Town of Carlton.

Water-enhanced uses in the Town of Carlton include Lakeside Beach State Park; a small number of restaurants in the Point Breeze and Waterport areas; bait and tackle shops; shoreline parks and Lake Ontario State Parkway, which extends from Lakeside Beach State Park to the eastern Town boundary and is a segment of the New York Great Lakes Seaway Trail.

- Kendall

The Bald Eagle Marina is the only water-dependent use in the Town of Kendall portion of the WRA. This private marina provides docking and other support facilities for recreational boating and is the location of several private charter fishing operations. It also includes a water-enhanced restaurant use. The Troutburg Cottages private residential area has a dock structure that could be utilized for shoreline fishing. As previously noted, the Lake Ontario State Parkway, which extends from Lakeside Beach State Beach in Carlton to the eastern

Town boundary in Kendall, is a segment of the New York Great Lakes Seaway Trail and is also considered a water-enhanced use.

2.5.3 Abandoned, Underutilized and Deteriorated Sites and Structures

Much of the Lake Ontario shoreline in Orleans County has been developed, largely for residential and recreational use. Real Property Services data indicate that there are just over 500 parcels classified as 'vacant'. The vast majority of vacant parcels (72%) are small residential building lots of 1 acre or less. If those lots are developed, they would be private residences for either year-round or seasonal residents.

There are limited areas of consolidated undeveloped land within the WRA. The following discussion addresses areas along the waterfront that could be considered underutilized.

- *"Morrison Site" and Yates Town Park – Morrison Road, Town of Yates*
  The largest parcel classified as 'vacant' is the site known as the Morrison parcel in the Town of Yates. This property was identified in the original LWRP as a potential development site. The site is owned by New York State Gas and Electric and was acquired by them for the purpose of a potential power plant. The power plant was built on a site in the Town of Somerset, and the Morrison site has remained vacant. It is adjacent to the Yates Town Park, and opportunities exist to use a portion of this property for improvements to the Town Park. Yates Town Park itself also has the potential for improvement for expanded use and enjoyment.

- *Shadigee - Route 63, Town of Yates*
  There is public land on the waterfront at the foot of Route 63 fronting on Lake Ontario in the Town of Yates. There are opportunities to make this area more attractive and inviting for small-scale passive recreation (mainly views of the lake).

- *Lakeside Beach State Park, Town of Carlton*
  This property is owned by the State of New York, and the Town has limited influence on improvements. However, there are opportunities for enhancements, particularly for lands west of Johnson Creek. Improvements could include passive recreation, such as nature trails. There is also interest on the part of residents for swimming facilities, either a beach or a swimming pool.

- *Patterson Pond and Village Park, Village of Lyndonville*
  There are a number of opportunities to improve facilities in the heart of the Village of Lyndonville, at Patterson Pond and the adjacent park. The park currently has limited facilities.

Improvements would help enhance recreational assets along Johnson Creek. Additional enhancements include repairs to the dam and dredging of the pond.

- *Fishing Access sites, throughout the WRA*
  There are a number of fishing access sites along the major creeks within the WRA that could be improved. In particular, improved parking and amenities, such as the provision of benches and trash receptacles would improve access and the public's enjoyment of these areas.

Several privately-owned accessory structures are found along Oak Orchard Creek that are in deteriorated condition or are abandoned and detract from the scenic quality of the creek corridor. Docks, stairways, camps, and boathouses are typical of these structures. Requirements for property maintenance and upkeep of these structures should be considered.

2.5.4 Zoning (see Maps 5A – 5C)

The Towns of Yates, Carlton and Kendall and the Village of Lyndonville all regulate land use through zoning regulations. Each community in the WRA has an adopted Zoning Ordinance. Additionally, the Towns of Kendall and the Village of Lyndonville have adopted Subdivision Regulations that govern the division of real property. Zoning regulations in each community typically include provisions for site plan review, special permits, signage, SEQR, and Administration and Enforcement. As shown on Maps 5A through 5C, the following zoning district classifications fall within the WRA for each community:

- *Town of Yates*

  Agricultural/Residential (AR)
  The purpose of the AR district is to protect agricultural lands and uses from incompatible uses and development, to provide for low-density, rural development, and to protect the natural environment. This zoning classification applies to the lands along Johnson Creek that fall within the WRA boundary.

  Waterfront Residential (WR)
  The purposed of the WR district is to recognize the Lake Ontario shoreline and its tributaries as a unique resource and to control future growth in a manner that respects the environmental limitations of the waterfront and affords maximum public enjoyment of the area. This zoning classification applies to most of the land along the Lake Ontario shoreline.

Site plans for development in the WR district shall be designed to preserve scenic qualities of the shoreline and vistas. Principal structures must be setback a minimum distance of 75 feet from the mean highwater line of Lake Ontario. The use of common easements and cluster development are encouraged to maximize public access and enjoyment of the lakeshore. Roadways shall be planned to provide the most effective access to individual parcels and lots and land area devoted to roads should utilize the minimum land required to provide access. No new roadway or roadway extension shall be permitted within 300 feet of Lake Ontario, except where extreme need is demonstrated.

Waterfront Development (WD)

The purpose of the WD district is to promote that particular mix of residential and commercial uses that make up a waterfront recreational area, recognizing that certain businesses are desirable to service seasonal recreational needs of both residents and tourists. This zoning classification applies to a large portion of land located east of North Lyndonville Road, some of which is located along the waterfront.

All applications for development within a WD district must be accompanies by a Coastal Assessment Form and a site plan that indicates that development will not create erosion or flooding or reduce or damage the aesthetic character of the area and will preserve the scenic qualities and vista of the shorelines within the adopted WRA. The use of common easements and cluster development are encouraged to maximize public access to and enjoyment of the shoreline. Roadways shall be planned to provide the most effective access to individual parcels and lots and the land area devoted to roads should utilized the minimum land area required to provide such access. No application for development of the waterfront or adjacent areas shall limit access to the water or to publicly controlled lands along the waterfront.

Flood Hazard Overlay District (F)

The Flood Hazard District is established to conform with the Flood Insurance Rate Map boundaries, as prepared by the Federal Emergency Management Agency. Such areas are subject to the provisions of the Town of Yates Flood Damage Prevention Law, in addition to the use regulations and other provisions of the Zoning Law.

- *Village of Lyndonville*

Agricultural-Residential (AR)

The purpose of the AR district is to protect agricultural land and uses from incompatible uses and development, to maintain a rural character of the community, and assure compatible types and

densities of development. This zoning classification applies to some lands along the Johnson Creek corridor in the northern portion of the WRA.

Single-Family Residential (R-1)

The purpose of the R-1 district is to provide for a stable environment for rural residential development, free from incompatible uses. This zoning classification applies to certain lands bordering Johnson Creek and the Patterson Pond area.

Central Business District (CBD)

The purpose of the CBD district is to provide for a concentration of principally retail and personal service businesses with a short walking distance of each other to serve the needs of area residents. This zoning classification applies to a small number of parcels situated along Main Street that fall within the WRA.

Light Industrial (LI)

The purpose of the LI district is to provide for light manufacturing, assembly and storage facilities and other compatible business uses, and to ensure that these uses will not be detrimental or hazardous to the surrounding community. This zoning classification applies to the Village-owned property that borders Johnson Creek and contains the Village wastewater treatment plant and parkland.

Flood Hazard Overlay (F)

The Flood Hazard District is established to conform with the Flood Insurance Rate Map boundaries, as prepared by the Federal Emergency Management Agency. Such areas are subject to the provisions of the Village of Lyndonville Flood Damage Prevention Law (Chapter 106 of the Village Code) in addition to the use regulations and other provisions of the Zoning Law, particularly where such other regulations or provisions may be inconsistent with Chapter 106).

- *Town of Carlton*

Hamlet (RH)

The purpose of this district is to recognize that the crossroads communities are unique areas where residential and commercial businesses exist in harmony, providing necessary basic services for the surrounding community and residences for those people who provide the services. This zoning classification is found in the Waterport business district.

Residential/Agricultural (RA)

The purpose of the RA district is to protect agriculatural lands and uses from incompatible lad uses and limit non-farm residential, commercial and industrial uses to those areas best suited by reason of their requirements for public services.

Waterfront Residential (WR)

The purpose of the WR district is to recognize the Lake Ontario shoreline and its tributaries as unique resource and to control future growth in a manner that respects the environmental limitations of the waterfront and affords maximum public enjoyment of the area.

Sites plans for development in the WR district shall be designed to preserve the scenic qualities of the shoreline and vistas. The use of common easements and cluster development are encouraged to maximize public access and enjoyment of the lakeshore. Roadways shall be planned to provide the most effective access to individual parcels and lots and land area devoted to roads should utilize the minimum land required to provide access. No new roadway or roadway extension shall be permitted within 300 feet of Lake Ontario, except where extreme need is demonstrated.

Waterfront Development (WD)

The purpose of the WD district is to promote that particular mix of residential and commercial uses that make up a waterfront recreational area, recognizing that certain businesses are desirable to service seasonal recreational needs of both residents and tourists.

Site plans for development in a WD district shall be designed to preserve the scenic qualities of the shoreline and vistas. The use of common easements and cluster development are encouraged to maximize public access and enjoyment of the lakeshore. All permanent structures shall be setback at least 50 feed from the waters edge with the exception of docks and boathouses. Roadways shall be planned to provide the most effective access to individual parcels and lots and the land area devoted to roads should utilize the minimum amount of land required to provide such access. No new roadway or roadway extension shall be permitted within 300 feet of Lake Ontario, except where extreme need is demonstrated.

Oak Orchard Preservation Overlay District

This district is established to protect and preserve the unique and irreplaceable natural conditions of the Oak Orchard Creek waterway and its adjacent land resources, as well as serving to protect, preserve and where practical, restore those areas determined to be significant coastal fish and wildlife habitats pursuant to 19 NYCRR Part 600 of New York State Law.

The Oak Orchard Creek Preservation District is an overlay district that includes the entire water surface area of Oak Orchard Creek, south of State Route 18 to the Waterport Dam, including significant fish and wildlife areas, all of the creek banks and a 25-foot top of bank setback. This setback is measured horizontally back from the highest adjacent grade of the bank.

The provisions of this overlay district take precedence over any other zoning district with the exception of the Flood Hazard regulations. Any and all development within 250 feet of Oak Orchard Creek Preservation District shall require site plan approval from the Town of Carlton Planning Board. No building permit and/or special permit shall be issued for development that would, or could, impair or depreciate the natural, unique and irreplaceable beauty and historic significance of Oak Orchard Creek. New structures and road, with the exception of fences, docks, boathouses, bridges and stairways shall not be contructed within 25 feet from the top of the creek bank. This natural buffer strip shall serve to provide protection from flooding and erosion, as well as to preserve stream corridor aesthetics.

No new dock or boathouse shall be located within 500 feet of another dock or boathouse, except when said new dock or boathouse is located on a separate and distinct, legally constituted lot or parcel, on the same side of Oak Orchard Creek. No new dock, boathouse, bridge or fence shall be constructed that would impede natural flow of the creek and will be so located, designed and constructed to minimize intrusion into the creek and avoid adverse environmental impacts.

Harvesting, cutting, removal or thinning of vegetation that would increase bank erosion, from the mean high water line to a point 25 feet from the top of the bank, is prohibited. This requirement shall prevent the regular mowing of weeds or grass, the removal of diseased vegetation or of rotten and damaged trees or vegetation that present a safety, environmental or public health hazard. The planting and promotion of vegetation to inhibit erosion is encouraged. Where the creek bank is excavated in any manner, vegetation to stabilize the bank and prevent erosion must be planted as per NYSDEC specifications.

- *Town of Kendall*

Residential/Agricultural (RA)

The purpose of the RA district is to protect agricultural lands and uses from incompatible uses and development and to promote development in areas best suited by reason of the availability of public services. This zoning classification applies to the lands bordering Sandy Creek that fall within the WRA and the lands surrounding the intersection of Lake Shore and Kendall Roads.

Conservation Zone Overlay District (C)

The purpose of the Conservation District is to protect unique and irreplaceable wetlands, wildlife habitats, geological formations, lakeshores, and stream banks in the Town. This district is an overlay zone that applies to all freshwater wetlands over 12.4 acres and smaller wetland areas that have been determined to be of unusual local importance. The provisions of this district take precedence over any other zoning district. This district adopts and incorporates, by reference, the provisions of the NYS Freshwater Wetlands Act.

Waterfront Residential (WR)

The purpose of the WR district is to recognize the Lake Ontario shoreline and its tributaries as a unique resource and to control future growth in a manner that respects the environmental limitations of the waterfront and affords maximum public enjoyment of the area. This zoning classification generally applies to land along the Lake Ontario shoreline that are situated west of West Kendall Road, the lands bordering the lakeshore between the terminus of Center Road and Kendall Road, and the lands bordering the lakeshore that lie between Bald Eagle Marina and the Cottage at Troutburg.

This district recognizes the changing needs of residents along the lakeshore with cottages turning to larger year-round homes and the need for ever larger accessory structures and classifies lakefront properties as lakefront, lakeview and combined lakefront/lakeview. Principal structures on a lakefront property cannot be located closer than 60 feet from the mean highwater line of Lake Ontario, plus any additional setback required to comply with the New York State Coastal Erosion Hazard Area Act (with the exception of flooding and erosion protection structures).

The WR district also acknowledges the need to preserve and protect unique scenic character of the Lake Ontario shoreline and the need to maintain view lines to the lake from lakeshore residences by ensuring that future development may not obstruct view lines. The maintenance of shoreline vistas is accomplished through the designation of a vista site line, as determined by the Code Enforcement Officer during site plan review, that is based on setbacks of the front main foundations of principal structures, limited to three lot widths on each side of new construction to establish a shoreline three-lot-width vista. The placing of a principal structure, accessory structure or building addition closer than the setback of neighboring properties, which would have the effect of reducing a three-lot-width vista site line, is not permitted. Additions to primary or accessory structures must not affect or obstruct existing vistas as observed from the from main foundation of the primary residence within the shoreline three-lot-width vista site line.

The use of common easements and cluster development are encouraged to maximize public access and enjoyment of the lakeshore. Roadways shall be planned to provide the most effective access to individual parcels and lots and land area devoted to roads should utilize the minimum land required to provide access. No new roadway or roadway extension shall be permitted within 300 feet of Lake Ontario, except where extreme need is demonstrated.

Waterfront Development (WD)

The purpose of the WD district is to provide for mixed residential, recreational, and commercial uses that relate directly to and complement water-dependent and water-enhanced uses, and accommodate the planned uses outlined in the Town of Kendall LWRP. This zoning classification generally applies to the shoreline properties that lie between West Kendall Road and the terminus of Center Road and the land area that extends west of Kendall Road to the east side of Bald Eagle Marina.

Like the WR district, provisions for the placement of shoreline structures and the preservation of vistas are included for development in the WD district. Development within the WD district requires a Special Use Permit. All applications for development must be accompanies by a Coastal Assessment Form and a site plan that indicates that development will not create erosion or flooding or reduce or damage the aesthetic character of the area and will preserve the scenic qualities and vistas of the shoreline within the adopted WRA. The use of common easements and cluster development are encouraged to maximize public access to and enjoyment of the shoreline. Roadways shall be planned to provide the most effective access to individual parcels and lots and the land area devoted to roads should utilized the minimum land area required to provide such access.

The use of common easements and cluster development are encouraged to maximize public access and enjoyment of the lakeshore. Roadways shall be planned to provide the most effective access to individual parcels and lots and land area devoted to roads should utilize the minimum land required to provide access. No new roadway or roadway extension shall be permitted within 300 feet of Lake Ontario, except where extreme need is demonstrated.

Waterfront Planned Development District (WPDD)

In additional to the established zoning districts that are regulation under Chapter 265 of the Town Code, waterfront property may be developed as a Waterfront Planned Development District pursuant to Chapter 167 of the Kendall Town Code. The purpose of the Waterfront Planned Development District is to promote flexibility in the development of waterfront parcels in accordance with the Town's Comprehensive plan and LWRP. The intent is to promote the most

appropriate use for these lands; to improve design, character and quality of new development; to encourage a harmonious and appropriate mixture of residential, commercial and nonindustrial uses; to facilitate the adequate and economic provision of streets, utilities and public services; to incorporate natural, environmental and scenic features of the site into the project and provide for the protection of the shoreline; to encourage and provide a mechanism for arranging improvements on a site so as to preserve desirable features; to promote architecture that is compatible with the surroundings; to provide suitable design responses to the specific environmental constraints of a site and the surrounding area; to protect the land from loss by erosion; to promote the safety of individuals; and mitigate problems that may be presented by specific site conditions.

A minimum of five acres is required for the establishment of a WPDD and development of a site must be coordinated with the Town's subdivision regulations. To formally establish a WPDD, the Town Board must adopt a local law to create the district and the zoning map must be amended to reflect the creation of the new zoning classification.

2.5.5 Public Lands and Underwater Land Ownership (Map 6 A-C)

There are a number of upland properties located within the WRA that are publicly owned (Table 5). These include the former Yates Pier, Yates Town Park and lands owned by NYSEG and the Lyndonville water treatment plant property in the Town of Yates; Village-owned parkland along Johnson Creek and Patterson Pond and public works properties, the public library, and lands owned by the Lyndonville Central School District at Patterson Pond in the Village of Lyndonville; Oak Orchard Marine Park, Orleans County Marine Park, Lakeside Beach State Park, Lake Alice public boat launch, lands owned by NYSDEC, and Waterport hydroelectric dam and portions of Lake Alice in the Town of Carlton are owned by Brookfield Renewable Partners; and the right-of-way for Lake Ontario State Parkway and a small area of Town-owned land in the Town of Kendall. Underwater land ownership is discussed as follows.

Table 5 – Publicly Owned Lands

Ownership Entity	Yates	Lyndonville	Carlton	Kendall
Municipal	6.05	25.86	0.80	1.96
State Owned	0.00	0.00	1208.18	515.45
Public Utility	269.52	0.00	118.88	0.00
Other	0.00	57.08	5.53	0.00
Total Acres	275.58	82.94	1333.39	517.41

Source: Orleans County Real Property Service

- *Public Trust Doctrine and Underwater Land Ownership*

  New York, upon attaining Statehood, succeeded the King of England in ownership of all lands within the State not already granted away, including all rights and title to the navigable waters and the soil under them (Public Lands Law, Section 4; People v. Trinity Church, 22 N.Y. 44, 1860; Langdon v. Mayor, 93 N.Y. 129, 1883). Broadly speaking, the State holds title to all underwater lands not otherwise conveyed away by patents or grants. The State holds title to these tidelands and submerged lands in its sovereign capacity in trust for the use and enjoyment of the public under the *Public Trust Doctrine* (People v. Steeplechase Park Co., 218 N.Y. 459, 1916; Appleby v. City of New York, 271 US364, 1926; Coxe v. State, 144 N.Y. 396, 1895). This legal doctrine emerged from the ancient concept that the sovereign had the right of way, an "incorporeal hereditament", to all navigable streams and waterways; the underlying theory being the protection of the public interest in fisheries and navigation.

  State title to the public foreshore and submerged lands, and the power of disposition, is incident and part of its sovereignty, which cannot be surrendered, alienated or delegated, except for some public purpose or some reasonable use for the public benefit, and without impairing public rights in the remaining lands and water. Inherent in the nature of public trust lands is the fact that they support diversified and important ecosystems without which many public rights, including fishing, swimming and the like, would be impossible to enjoy. The public interest demands the preservation and conservation of this vital natural resource against pollution, overuse, destruction, and infringement by others, whether public or private.

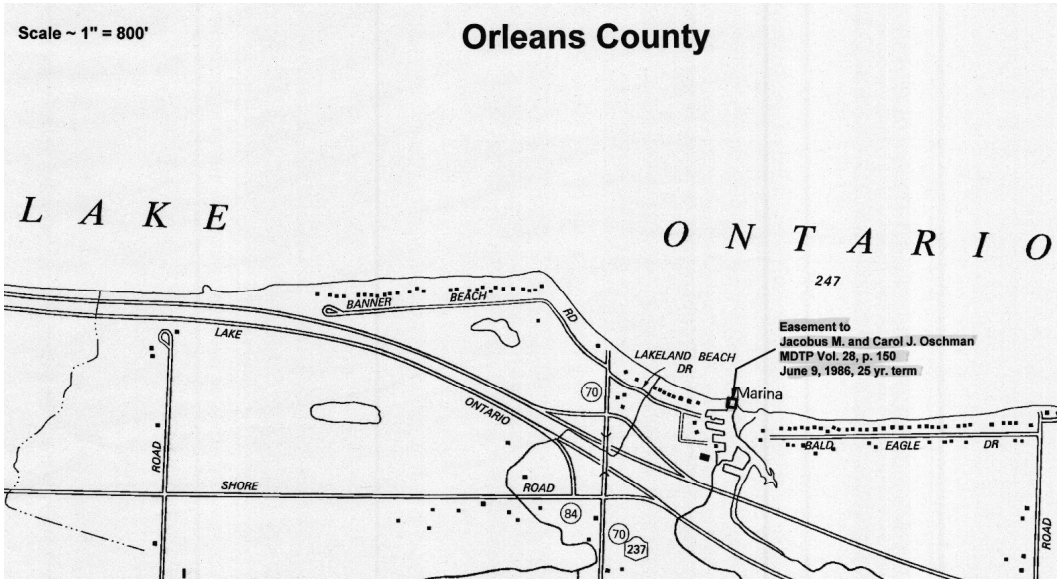
  It is in the public interest that State and other governmental ownership of public trust lands be maintained and, when possible, recovered from private ownership. Where full public ownership no longer exists, the application of the Public Trust Doctrine requires that any remaining rights of the public to use such lands should be preserved and protected for present and future enjoyment.

  Occupation of public trust lands by riparian (upland) owners for purposes of gaining access to navigable waters should be undertaken in a reasonable manner that does not unnecessarily interfere with the public's right of passage upon, the use of the waters overlying such lands, and other public trust purposes. Considerations of public safety, resource protection and the need for access at a given location may be utilized as factors in determining the level and types of access to be provided. Public use of publicly owned underwater lands and lands immediately adjacent to the shore shall be discouraged only where such use would be inappropriate for reasons of public safety, military security, or the protection of coastal resources.

Ownership of Lakes Erie and Ontario, within the territorial limits of New York State, and all submerged lands, including the subsurface lying under the lakes, is held by the State of New York, unless ownership has been granted to any other person or entity. The underwater lands of the Great Lakes are susceptible to private ownership only for special purposes. The boundary line between State ownership of the lakebed or riverbed and ownership of the adjacent upland is the low water mark.

- *Underwater Land Grants and Leases*

  For many years, New York State has authorized the use of lands underwater through the issuance of land grants, easements, and leases. Grants were issued for commerce and given to shorefront businesses for more restricted activities and were usually written with conditions. If the conditions were not followed, the State could bring an action to declare the grant void and thereby recover land ownership, per Section 78 of the Public Lands Law. Other grants were issued for beneficial enjoyment grants and were given to shorefront property owners without restriction, which provided more complete title to the underwater lands. In either case, the grantee was given full ownership rights to the bottom lands. Grants for commerce were issued in the early to mid-1800's, and then the issuance of grants for beneficial enjoyment became more commonplace. Around 1890, the State began to restrict the grants issued for beneficial enjoyment, as well. Furthermore, in making grants of underwater lands, the State could also impose conditions on the use of these lands.



Source: NYSOGS, Bureau of Land Management.

According to the NYS Office of General Services (OGS) Bureau of Land Management only one underwater land grant has been issued by the State along the shoreline of Lake Ontario in the WRA (Kaleb Winters, OGS, April 19, 2018). This grant was issued in June of 1986 to Jacobus M Oschmann and Carol J. Oschmann for action at the mouth of Bald Eagle Creek in the Town of Kendall. It was a renewal of a prior grant that was issued to Clarence H. Schepler in October of 1964 and was issued for the express purpose of maintaining two existing rubble stone piers, measuring approximately 50 feet in length and 20 feet in width, to maintain the channel from Bald Eagle Creek into Lake Ontario.

Based on discussions with the OGS Bureau of Land Management, the interest in underwater lands is attached to either the new upland property that is created through fill activity, or to the coterminous upland property. As ownership of the land changes hands, the historic interest in the underwater land moves with the title to the land. For private property, because the interest in the underwater lands is attached to the title, there is no need for the State to reconvey the lands to the new landowner. Therefore, underwater land ownership has been transferred through property sales, over the years, to the present-day owners of the upland properties. In the future, if any shoreline property owners are proposing the installation of offshore docking facilities or other structures that require the use of bottom lands, confirmation of the historic land grants should be cleared with the OGS.

- *Management of Underwater Lands*

  As noted, State-owned underwater lands in Lake Ontario are managed by the OGS. The OGS issues grants, leases, easements and other interests for the use and occupation of these underwater lands. They also investigate encroachments on littoral rights (the right of an upland owner to access the navigable waters of the lakes) and make sure there is no interference with navigable channels. The OGS reviews all NYSDEC and Army Corps of Engineers permit comments for proposed projects that affect State-owned bottom lands to ensure that the benefits of the public will not be deprived, and that the environment will not be adversely impacted. The OGS strives to achieve satisfaction on the part of all parties involved prior to the issuance of an interest (grant, lease, or easement) for the use of State-owned underwater lands.

  The State Office of General Services Bureau of Land Management is the agency responsible for issuing grants, leases and easements for the use of underwater lands, and for other interests for docks and associated marine-related structures that are placed on State-owned underwater lands. In the case of the Town of Yates, Carlton, and Kendall, the OGS is the authorizing agency for the use of underwater lands for docks or other marine structures proposed along the Lake Ontario shoreline. The construction of any commercial dock or any private, non-commercial dock that

exceeds 4,000 square feet in area size (including the perimeter) would require the granting of an interest (a grant or easement) from the OGS. Non-commercial structures that are less than 4,000 square feet in size (as measured from the outermost perimeter and including the surface area of the water contained within), less than 15 feet in height, and have a capacity of five or fewer boats, would not need an interest from the OGS. Commercial structures or non-commercial structures that exceed 4,000 square feet in size would need review and approval by the OGS, as well as the NYSDEC and Army Corps. of Engineers, depending on the extent of resource disturbance.

2.5.6 Public Access and Recreation (Map 7 A – C)

Public parkland and waterfront access are primarily enjoyed at two State Parks, one County Park and a few local parks within the Yates, Carlton, and the Village of Lyndonville. There are no public park facilities in the Town of Kendall. There are also a number of private marinas, yacht clubs and docks located along the Lake Ontario, Oak Orchard Creek and Johnson Creek shorelines. There are also three private campgrounds located in the Town of Carlton that provide public access to local waterways. Public access to Lake Ontario and local creeks, including Sandy Creek in the Town of Kendall, is also available from a number of private properties, residential subdivisions and road ends throughout the WRA.

- *Lakeside Beach State Park*

  Lake Ontario State Park is located in the Town of Carlton. It includes 1.5 miles of shoreline that provide panoramic view of Lake Ontario. This 731-acre park is open year-round and offers a campground with 274 sites with electric and water service and support facilities, six playgrounds, two picnic areas with one pavilion, one volleyball court, four miles of hiking and biking trails and the Wind Shore 18-hole disc golf course. Fishing is allowed along the Lake Ontario shoreline and seasonal waterfowl hunting is permitted in a designated area. The park is used in the winter for hiking, cross-country skiing, and snowmobiling.

Lakeside Beach State Park

Opened in 1972, Lakeside Beach State Park was originally designed for swimming, camping and day use activities but, due to budget cuts, only the camping and day use facilities were completed. This is the only State park facility along the Great Lakes or Atlantic Ocean in New York State that does not have public swimming facilities. Campers and other park visitors must utilize Hamlin Beach State Park to the east for swimming. Additionally, public access to Lake Ontario for swimming is also restricted by high bluffs along the shoreline. Although attempts have been made to secure funding for the construction of a swimming pool in this park, to date it has not been accomplished. To keep this State park an attractive destination for public recreation, swimming facilities are needed.

- *Oak Orchard Marine Park*

Oak Orchard Marine Park is owned and operated by New York State. It is located in the Point Breeze hamlet area in the Town of Carlton, at the mouth of Oak Orchard Creek on Lake Ontario. It includes parkland facilities on both sides of the creek. The parkland on the west side of the creek encompasses 76 acres that includes a small parking facility, a four-bay boat launch ramp, transient dockage for ten boats, picnic area, public restrooms and parking for 96 car/trailers and 25 cars. This park also includes an extensive area of forest and open space and trail access to the western federal breakwater, at the creek mouth, for fishing access.

Public Parkland on Oak Orchard Creek

The State-owned parkland on the east side of the mouth of Oak Orchard Creek, at Point Breeze, is leased to Orleans County on a long-term basis and functions as the northern portion of Orleans County Marine Park (OCMP). It is located on end of Ontario Street, at the north end of Point Breeze Road. This five-acre site provides three boat launch ramps, transient docking, shoreline fishing (including handicapped fishing access) and scenic and scenic vistas of Lake Ontario. It has access to the eastern federal breakwater at the mouth of the creek, where shoreline fishing is a popular activity. Public parking and restrooms, an information kiosk, interpretive signage and the Oak Orchard Lighthouse and Museum are also located at this site. This area experiences congestion during fishing derbies and other seasonal events due to its limited size.

Orleans County Marine Park North

- *Orleans County Marine Park*

  In addition to OCMP North, the main portion of Orleans County Marine Park is located to the south, on Point Breeze Road (NYS Route 98), in the Town of Carlton. This 11-acre public park extends along the east side of Oak Orchard Creek, beneath the Lake Ontario State Parkway bridges. It offers a variety of amenities, including 74 boat rental slips with electric and water service, a fishing dock, a fish cleaning station, a scenic overlook and walkway, picnic areas, car and boat trailer parking area, public restrooms, playground area, and a concert/picnic pavilion. The park office houses public showers/restrooms and the Orleans County Marine Patrol unit, which offers a US Citizen and Immigration Service video phone.

Orleans County Marine Park

The park is popular for summer events that include the Orleans County Pro-Am Fishing Tournament in June, the annual Cruise-in Car Show and the Oak Orchard Neighborhood Association's Summer Concert Series during July and August. The park pavilions can be reserved for picnics and other events.

- *Yates Town Park*

  Yates Town Park is located on the Morrison Road extension at the end of Power Lane. This 4.75-acre park offers picnic tables and grills, a picnic pavilion, scenic views of Lake Ontario and a large mowed area suitable for field sports.

Yates Town Park

- *Former Yates Pier*

  The Village of Lyndonville owns an approximately 2.9-acre property at the end of North Lyndonville Road that is the site of the former Yates Pier. This property has a narrow area of greenspace along the Lake Ontario Waterfront and is the site of the Village of Lyndonville Water

Treatment facility. With a small parking area, this site has the potential for improvement for enhanced public use for picnicking and scenic viewing.

- *Patterson Pond and Village of Lyndonville Fishing Access*
  Patterson Pond is located in the Village of Lyndonville and is supported by a dam that is a popular location for shoreline fishing. The Villages owns two small properties on each side of the dam where anglers can access the dam and the waters of Johnson Creek.

  Further east along Johnson Creek, the Village owns additional property that is available for picnicking and shoreline fishing. This 10.1-acre property is the site of the Village's wastewater treatment plant and has ample parking area and shoreline access for public enjoyment. This property is underutilized and could be improved for enhanced public recreation and enjoyment.

Former Yates Pier Site

Patterson Pond

Johnson Creek Fishing Access

- *Lake Alice Public Boat Launch*
  There is a small area for boat launching located on Clarks Mills Road, along the north shore of the Lake Alice (Waterport) Reservoir in the Town of Carlton. This facility, which is maintained by the County, includes a concrete launch ramp with parking for eight cars and trailers.

- *Private Recreation Facilities*

  There are a small number of private campground and lodging facilities, as well as a number of private boat launches and docks available at private marinas, that provide public access to local waterways.

  Green Harbor Campground and Marina is a private facility located in the western portion of the Town of Carlton, along the Lake Ontario shoreline. This 16-acre, full-service campground has 89 campsites, two cabins and an area for tent camping. It offers 700 feet of beach area along Lake Ontario and a marina with 30 docking slips.

  Riverview Campground is located off Park Avenue, along the south shore of Oak Orchard Creek, in the Town of Carlton. Located near Waterport and the Lake Alice Reservoir, this property offers 72 campsites, with water, electric and sewer service, and a boat dock.

  Camping, lodging and recreation is also available in the Lake Alice / Oak Orchard Creek area at the St. Mary's Sportsman and Archery Club on Clark Mills Road, Cedar Valley Lodging on Park Avenue, Pleasant Point Campground on North Road in Waterport, and the Red Breeze private campsite on Waterport-Carlton Road in Waterport.

2.6 Surface Water Uses, Navigation and Harbor Management

The NYS Executive Law, Article 42-Waterfront Revitalization of Coastal Areas and Inland Waterways was amended in 1992 to provide local governments with the clear authority to comprehensively manage activities in nearshore areas within their WRA by developing comprehensive harbor management plans (HMPs) and local laws to implement these plans. Pursuant to 19 NYCRR Part 603, an LWRP must incorporate an HMP addressing existing or potential water-dependent use conflicts and associated local controls. An HM must include an inventory of local and regional conditions and needs including, as applicable, the competing needs of commercial and recreational boating and fishing, waste management, dredging and mineral extraction, public access and recreation, habitat and the protection of other natural resources, water quality, open space needs, aesthetic values, common law riparian or littoral rights and the public interest in underwater lands. The KYCL Harbor Management Area encompasses the waters of Lake Ontario and its tributaries, including Johnson Creek, Oak Orchard Creek and Eagle Creek, as well as Lake Alice and Sandy Creek. The HMP incorporates information included in this Subsection of the LWRP, and Subsections 2.5.5 (Public Land and Underwater Lands), 2.5.6 (Public Access and Recreation), 2.7.1 (Water Quality), 2.7.2 (Wetlands and Habitats), 2.7.4 (Flooding), and 2.7.5 (Erosion), to address issues commensurate to the local conditions related to the use of the surface waters and underwater lands in the WRA.

2.6.1 Surface Water Resources

Surface waters in the WRA include the Lake Ontario, Johnson Creek, Oak Orchard Creek and Lake Alice, Marsh Creek, Bald Eagle Creek and Sandy Creek, as well as a number of lesser streams and tributaries. Local surface waters are utilized for a variety of uses, including recreational boating and sailing, swimming, recreational fishing, and waterfowl hunting. Lake Ontario is also a source for local drinking water supply and a discharge point for wastewater effluent. All local surface water bodies also receive significant stormwater discharges, whether through point sources or overland flow.

- *Lake Ontario*

Lake Ontario is the 14th largest lake in the world and the smallest of the five Great Lakes. It has a surface area that measures 193 long by 53 miles wide and is the fourth deepest of the five lakes. The average depth in the lake is 283 feet (maximum depth 802 feet). Water depths in the WRA range from between one to five feet along the shoreline to over 20 feet within 1,500 feet of the shoreline. Although similar in size to Lake Erie, Lake Ontario holds four times the volume of water. The drainage basin for the Lake Ontario watershed includes parts of Ontario, Canada, and New York State. The drainage basin measures 24,720 square miles. The total retention time for water in the lake is six years (which is based on the volume of water in the lake and the mean rate of outflow). Lake Ontario supports a thriving recreational boating and sportfishing industry. It also supplies drinking water and is a location for the disposal of wastewater effluent for a number of communities along its shoreline.

- *Oak Orchard Creek*

Oak Orchard Creek (also known as Oak Orchard River) extends inland from Lake Ontario at Point Breeze, in the Town of Carlton, to its headwaters in Genesee County to the south. Oak Orchard Creek is a significant waterbody that provides extensive wildlife habitat and recreational opportunities. This creek is used for recreational boating and sportfishing, with numerous marinas located along its shores, including Oak Orchard Marine Park and Orleans County Marine Park.

- *Johnson Creek*

  Johnson Creek extends south and west through the Town of Carlton and Town of Yates, from Lake Ontario to its headwaters in Niagara County. Johnson Creek passes through the Village where a dam was installed years ago for milling grain. Johnson Creek is used for recreational boating and sportfishing; the Lyndonville dam is one of several popular locations for Salmon fishing.

- *Marsh Creek*

  Marsh Creek is a tributary of Oak Orchard Creek that extends into the Town of Carlton, to the east of Oak Orchard Creek. It has smaller tributary streams that reach into the southern portion of the Town. Marsh Creek supports extensive wetlands, providing wildlife habitat and nursery area for fish.

- *Bald Eagle Creek*

  Bald Eagle Creek extends inland from Lake Ontario, in the Town of Kendall. The mouth of the creek, at the lakeshore, has been developed with a private marina (Bald Eagle Marina). Two rock jetties create a formalized navigation channel into the lake. The area immediately east of the marina contains extensive areas of freshwater wetlands. The creek narrows as it moves south of the Lake Ontario State Parkway, negating opportunities for small vessel use. Bald Eagle Creek provides wildlife habitat and opportunities for shoreline fishing in certain areas. This small creek has a number of smaller tributary streams that branch out through the southern portion of the Town.

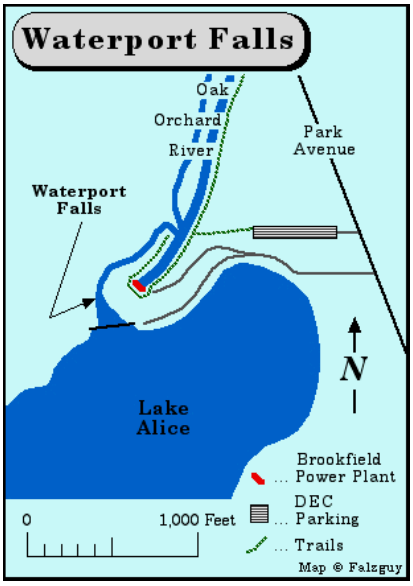
- *Sandy Creek*

  Sandy Creek extends through the southeastern corner of the Town of Kendall. The mouth of the

creek is located to the east in Sandy Harbour Beach in Monroe County. The creek bifurcates south of Kendall, with headwaters for the western and eastern branches located in the Towns of Gaines and Clarendon. The portion of Sandy Creek that flows through the Town of Kendall provides wildlife habitat and offers opportunities for local sportfishing.

- *Lake Alice (Waterport Reservoir) and Dam*

Lake Alice, also known as the Waterport Reservoir, is a 335-acre impoundment along the upper reach of Oak Orchard Creek. This reservoir, which is 331 feet deep and offers over 10 miles of shoreline, is a popular location for recreational fishing, boating, and water sports. Oak Orchard Creek was dammed around 1920 for hydroelectric power generation. The spillway below the dam has a vertical drop of about 65 feet and is separated from Waterport Falls, a rock cascade where water flow from the reservoir continues to naturally reach Oak Orchard Creek. Because of the limited public land holding and steep cliffs and embankments around the falls, access to the waterfall is prohibited.

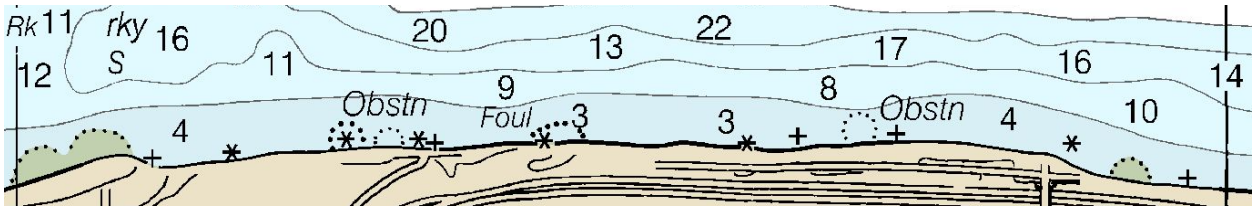


The area immediately below the dam is a popular location for shoreline fishing for salmon. This area supports extensive fishing during the height of the salmon run. Fishermen utilize the local access road to reach the dam and parking is accommodated along this roadway and in a parking, lot maintained by the NYSDEC. Use of this area is not well controlled.

2.6.3 Vessel Use and Navigation

Vessel use in and along the WRA occurs on Lake Ontario, Oak Orchard Creek, Lake Alice, and the lower reaches of Johnson and Bald Eagle Creeks. Vessel use is limited to small pleasure craft, which are used extensively for recreational boating, sailing, and fishing, as well as charter fishing vessels. Access to local surface waters is provided by marinas, yacht clubs and boat launch facilities. There are no public docks or boat launch facilities located directly along the Lake Ontario shoreline; they are found at the mouths and along the upper reaches of Oak Orchard and Johnson Creeks. Some of the local marinas providing docks for charter fishing vessels within the WRA. Such uses and facilities can be found in the Oak Orchard Creek and Bald Eagle Creek areas.

Navigation on the Lake Alice reservoir is regulated under Section 45-aaaaa of the New York State Navigation Law. This section of the law requires that vessels on Lake Alice operate in a careful and prudent manner and not unreasonably interfere with or endanger any other vessel of person. It further restricts vessel operating speeds to 35 miles per hours in open waters and 5 miles per hour within 100 feet of the shoreline, any dock, pier, raft or float, or any anchored or moored vessel unless such vessel is enabling a person who is water skiing to take off or land. These regulations do not apply to any pleasure vessel competing in or practicing for a regatta or boat race over a specified course held by a bona fide club or racing association, with specific provisions as specified in the law.
Navigation along the Lake Ontario shoreline is restricted by shallow water depth and rocky conditions. Navigation charts for the areas show numerous rocks, some of which are only visible at low tide, as well as areas with ruins and other obstructions.



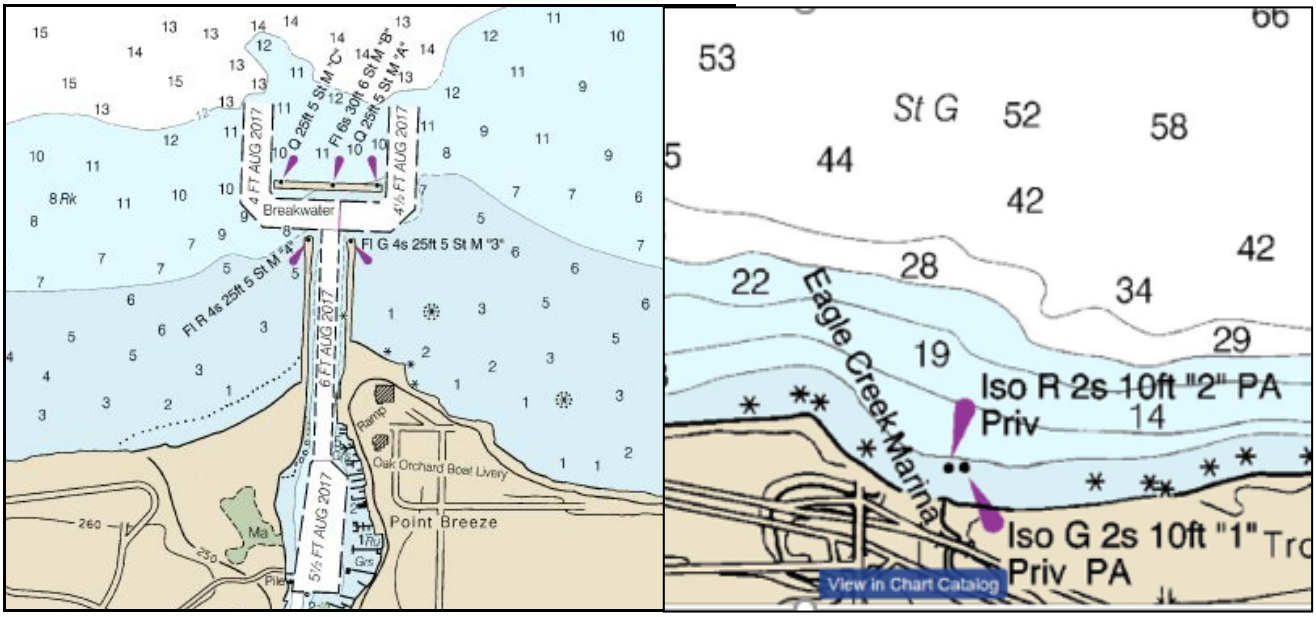
Source: NOAA Navigation Chart No. 14805, August 10, 2018.

- *Navigation Aids*

  The mouth of Oak Orchard Creek has been developed as a federal navigation channel. The entrance channel is comprised of two 1,000-foot rock jetties that extend along the east and west

sides of the channel and a 550-foot long concrete breakwater that lies perpendicular to, and seaward of the jetties, creating a harbor of refuge. Navigational aids are located around the

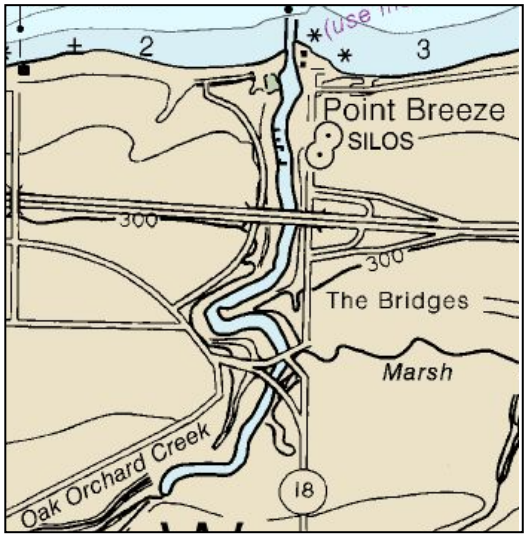
Entrance Channel Oak Orchard Creek at Point Breeze and Bald Eagle Marina



Source: NOAA Navigation Chart No. 14805, August 10, 2018.

entrance, including a flashing light at the end of each jetty and three lights located on the breakwater. The channel was completed in 1975 by the Army Corps. of Engineers. The entrance channel to Bald Eagle Marina, in the Town of Kendall, is aided by two private lights that are located on each side of the channel.

Oak Orchard Creek is fully navigable for motorized vessels from Lake Ontario to just beyond Marsh Creek and the Bridges area, with channel depths averaging around 15 feet. As discussed in Section 2.6.3, there are several marinas and two yacht clubs located along the creek corridor, which offer extensive boat dockage. The creek is also heavily utilized for non-motorized boating, including canoes and kayaks. Beyond the Bridges area, boating occurs on the Lake Alice (Waterport) reservoirs, where recreational fishing and other water sports are popular activities.



Source: NOAA Navigation Chart No. 14805, August 10, 2018

Johnson Creek is primarily navigable for motorized vessels in the lower reaches, near Lake Ontario (in the Lakeside State Park Area). Like Oak Orchard Creek, Johnson Creek is also a popular location for non-motorized boating. Bald Eagle Creek in the Town of Kendall is only navigable in the lower reaches, near Bald Eagle Marina.

2.6.3 Marinas and Docks

There are a number of public and private marinas within the WRA. With the exception of Eagle Creek Marina in the Town of Kendall and Green Harbor Marina in the Town of Carlton, which are both located on Lake Ontario, public and private marinas are found along Oak Orchard Creek in Carlton. Most marinas provide dockage and boat launch access to the creek (or lake).

There are numerous private docking facilities found along the shoreline of many of the creeks, in particular Oak Orchard Creek, that are associated with private residential properties, which enable residents to utilize the creeks for recreational boating and fishing. Boat docks along Lake Ontario are limited due to shoreline conditions and the seasonal impacts of lake waters.

The installation of docks, pilings, decks and boathouses along the creeks and on Lake Ontario, is regulated by the Army Corps. of Engineers and requires the issuance of a Regional Permit, pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Structures that do not meet the conditions of the Regional Permit can be considered for approval under an Individual Permit. NYSDEC approval may also be required depending on the circumstances.

2.6.4 Recreational Fishing

Recreational sports fishing is a popular sport and a significant industry on Lake Ontario. Whether from water or land, anglers are active throughout the year in search of numerous species of fish that can be found in the Lake Ontario and local creek waters in the WRA, including steelhead (rainbow) trout chinook and oho salmon, lake trout, largemouth and smallmouth bass, perch, smelt and northern pike.

Shoreline fishing is also popular in the area. Lake Ontario and the local creeks offer numerous locations to throw a line in the water. Johnson, Oak Orchard, Marsh and Sandy Creeks attract anglers seeking steelhead trout or salmon. The foot of the Waterport Dam is another popular location, particularly during salmon runs.

Every year the NYSDEC releases huge amounts of fish into public streams, rivers, and lakes across the State to restore native species and to enhance recreational fishing, including Lake Ontario and the creeks. In 2017, fish stocking in Lake Ontario includes approximately 1.35 million Chinook salmon, 232,020 Coho salmon, 656,505 steelhead) trout, 411,890 brown trout, 127,111 Atlantic salmon, 201,147 lake trout and 170,000 walleye.

There are numerous charter fishing establishments, regional fishing clubs, fishing derbies and locations for trailer and car top boat launching in the region. Maps are available that provide a wealth of information about local fisheries, launch areas and marinas, shoreline fishing locations, charter fishing and licensing and the like. Information about when and where to fish in the area can also be found on the NYSDEC, Orleans County Tourism, and other sports fishing websites. Public boat launching in the WRA occurs at Oak Orchard and Orleans Marine Parks and on Lake Alice; launch ramps are also found at private marinas. There are also two inactive boat launches on Johnson Creek in Lakeside Beach State Park, including one at the intersection of Lakeside and Church Roads in Kuckville.

Marinas in the Point Breeze and Bridges areas provide a variety of services for boaters, including vessel pump-out facilities, fuel, and fish cleaning stations. Bait and tackle and fishing licenses can also be purchased at establishments in the Bridges area.

There is a critical need for additional boat launching sites, parking, and lodging facilities to respond to and support increasing angler activity in the area. Fisherman will go to areas where such facilities exist and there are economic benefits associated with providing these services.

2.7 Environmental Resources (Maps 8 A-C)

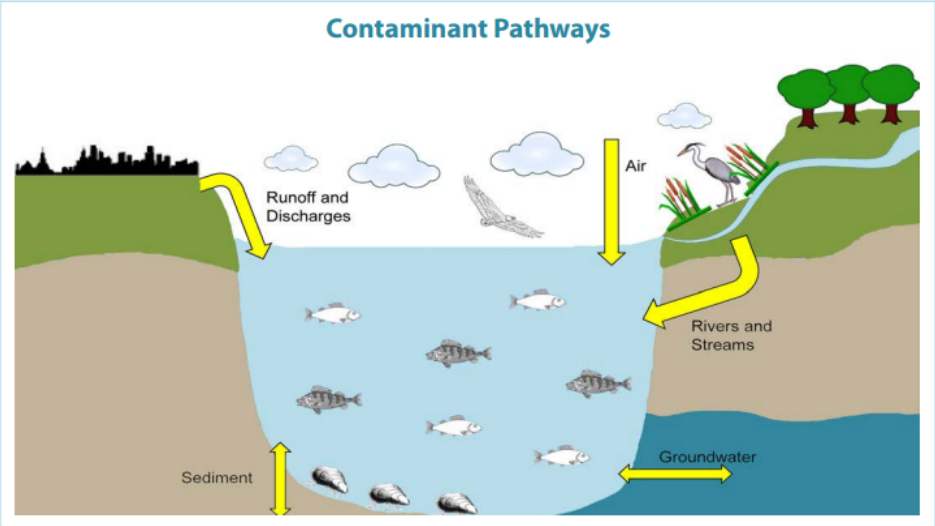
2.7.1 Water Quality

Water resources, both surface and groundwater, are an important public asset and have influenced the existing character and extent of land uses along the lakeshore, creeks, and tributary fringe areas of the WRA. Water quality will play a significant role in the future character of the WRA; maintaining water quality offers benefits for public health, recreation, scenic resources, and economic vitality in the waterfront area. It is dependent upon proper use and management of surface and groundwater resources and surrounding land uses.

The WRA includes portions of four separate watershed basins that drain to Lake Ontario. These include the Lake Ontario/Golden Hill Creek watershed, Lake Ontario/Johnson Creek watershed, Oak Orchard Creek watershed and Lake Ontario/Sandy Creek watershed. All told, Lake Ontario receives inflow from approximately 24,000 square miles of upland area through creeks and tributaries throughout the watershed areas.

Groundwater is the principal water source for residents. Efficient and proper use of this limited resource is critical if it is to continue as the major supply of potable water for the region. Local surface waters provide important habitat for flora and fauna, which are important for many reasons. Therefore, the protection of surface and groundwater quality and quantity is of utmost importance.

Contaminants are distributed to Lake Ontario and its tributary creek and stream systems in various ways. As shown below, these include stormwater runoff which carries non-point source pollution and direct discharges; inflow to the lake and major streams through tributary sources, groundwater flows and air pollution. Contaminants that find their way into local surface waters settle into bottom sediments where they can adversely impact marine life.



Source: Great Lakes Restoration Initiative Action Plan II, September 2014.

Pursuant to Article 15 of the Environmental Conservation Law, the New York State Department of Environmental Conservation (NYSDEC) created the Protection of Waters Program to prevent undesirable activities on waterbodies by establishing and enforcing regulations that: are compatible with the preservation, protection and enhancement of present and potential values of the water resources; protect the public health and welfare; and are consistent with the reasonable economic and social development of the State.

In accordance with Title 6 of the New York Code of Rules and Regulations (NYCRR), Part 701-Classifications - Waters and Groundwaters, the NYSDEC assigns water quality classifications to surface waters in New York State. These classifications identify existing or expected best usage for each waterway or waterway segment in the State. The classification categories that apply within the WRA are noted in Table 6.

- *Classification A-Special (A-S)* - The best usages of Class A-S waters are drinking water supply, culinary or food processing purposes; primary and secondary contact recreation; and fishing. These waters are considered suitable for fish, shellfish and wildlife propagation and survival.

- *Classification A* - The best usages of Class A waters are a source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. These waters are considered suitable for fish, shellfish and wildlife propagation and survival.

- *Classification B* - The best usages of Class B waters are primary and secondary contact recreation and fishing. These waters are suitable for fish, shellfish and wildlife propagation and survival.

- *Classification C* - The best usage of Class C waters is fishing. These waters shall be suitable for fish, shellfish and wildlife propagation and survival. These waters may be suitable for primary and secondary contact recreation, although other factors may limit the use for such purposes.

Table 6 - Water Quality Classifications

Waterbody Segment	Water Index No.	Classification
Lake Ontario Shoreline, Western	Ont. (portion 19)	A
Lake Ontario Shoreline, Western	Ont. (portion 20)	A
Johnson Creek	Ont. 139	C
Oak Orchard Creek, lower and minor tributaries	Ont. 138	C
Marsh Creek and tributaries	Ont. 138-1	C
Waterport Pond (Lake Alice reservoir)	Ont. 138 (portion 2)	C
Oak Orchard Creek, middle and minor tributaries	Ont. 138 (portion 3)	C
Sandy Creek and minor tributaries	Ont. 130	C
Sandy Creek – East branch and tributaries	Ont. 130-1	C
Sandy Creek – West branch and tributaries	Ont.130-2	C
Bald Eagle Creek	Ont. 134	C

Source: Title 6 NYCRR, Chapter: Division of Water Resources, Part 847.5

Aside from Lake Ontario, which has a water quality classification of A, all surface waters in the WRA are classified C. Class C waters are best used for fishing. None of the surface waters in the WRA have an associated standard of (T) or (TS) attached, which indicates the presence of trout or trout spawning.

- *Priority Waterbodies List*

  The water quality classifications assigned to waterbodies do not necessarily (or accurately) reflect all water quality issues and conditions. The Federal Clean Water Act requires states to periodically assess and report on the quality of waters in their jurisdiction. Therefore, the NYSDEC has developed a State-wide inventory of specific waterbodies that is based on monitoring and information drawn from other programs and sources. This inventory characterizes general water quality, the degree to which water uses are supported, and progress made toward the identification of quality problems and improvements. The NYSDEC Division of Water periodically publishes a list of the surface waters that cannot be fully used as a resource or have problems that can damage their environmental integrity. The "Waterbody Inventory /Priority Waterbodies List" is used as a base resource for the NYSDEC Division of Water program management (see Table 7). Separate Waterbody Inventory/Priority Waterbodies List Reports are prepared and maintained for each of the major drainage basins in the State. The list includes an assessment of water quality for waterbodies under six categories, which include:

- *Waters with No Known Impacts* – waterbody segments where monitoring data and information indicate no use restrictions or other water quality impacts or issues.

- *Threatened Waterbody Segments* – waterbody segments for which uses are not restricted and no water quality problems exist, but where specific land use or other changes in the surrounding watershed are known or strongly suspected of threatening water quality; or waterbodies where the support of a specific and/or distinctive use makes the waterbody susceptible to water quality threats

- *Waters with Minor Impacts* – waterbody segments where less severe water quality impacts are apparent but uses are still considered fully supported (these waters correspond with waters that are listed as having "stressed" uses).

- *Waterbodies with Impacts Needing Verification* – these are segments that are thought to have water quality problems or impacts, but where there is insufficient or indefinitive documentation. These segments require additional monitoring to determine whether uses should be restricted.

- *Impaired Segments* – these are waterbodies with well documented water quality problems that result in precluded or impaired uses.

- *UnAssessed Waterbodies* – waterbody segments where there is insufficient water quality information available to assess the support of designated uses.

Impaired waterbodies are deemed waters that frequently do not support appropriate uses. Impaired segments, waters with Minor Impacts and Threatened Waterbody segments are the focus of remedial/corrective and resource protection activities by the NYSDEC. Table 7 outlines the use impairments, types of pollutants and sources for each listed waterbody located within the WRA, which is part of the Lake Ontario Basin Waterbody Inventory area for the Priority Waterbodies List. This inventory evaluates conditions in Lake Ontario, Johnson Creek, Oak Orchard Creek, Marsh Creek, Sandy Creek and Bald Eagle Creek.

Water quality, particularly in the Lake and at the mouth of the creeks, is a local and regional concern due to impacts from nutrients, priority organics and pathogens, which are in many cases known sources of contamination and impairment. The Lake Ontario shoreline is assessed as an impaired waterbody due to public bathing beaches and other recreational uses, as well as fish consumption that is also considered to be impaired. Recreational uses are impaired by indicators

Table 7 - Priority Waterbody List - Water Quality Impairments					
Water Body	**Category**	**Impaired Uses/Conditions**	**Severity**	**Type of Pollutant**	**Causes/Sources**
Lake Ontario Western Shoreline Ont. – portions 19 and 20	Impaired Segment	Fish Consumption Public Bathing Recreation Aquatic Life Water Supply Habitat/Hydrology Aesthetics	Impaired (*known*) Fully Supported (*known*) Fair	*Known:* NUTRIENTS; PRIORITY ORGANICS (PCBs, DIOXIN) PESTICIDES (MIREX) ALGAL/NATIVE PLANT GROWTH (CLADOPHORA) *Suspected:* Silt/Sediment	*Known:* CONTAMINATED /TOXIC SEDIMENTS; Atmospheric Deposition *Suspected:* AGRICULTURE; HABITAT ALTERATION; Urban/Storm Runoff
Johnson Creek Ont. 139 – portion 1 46.5 miles – mouth to Lyndonville	Minor Impacts	Fish Consumption Aquatic Life Recreation	Stressed (*known*)	*Known:* NUTRIENTS; PRIORITY ORGANICS (PCBs, DIOXIN) PESTICIDES (MIREX) *Suspected:* Silt/Sediment *Possible:* Pathogens	*Suspected:* AGRICULTURE; Other Sources (migratory fish species): Stream Bank Erosion, Toxic Contamination, Sediment *Possible:* Landfill/Land Disposal; On-site Septic Systems
Oak Orchard Creek Lower/ minor tributaries (Ont. 138-portion 1) 7.9 miles from the mouth to Waterport Reservoir	Minor Impacts	Aquatic Life Fish Consumption Recreation Habitat/Hydrology Aesthetics	Impaired (*suspected*) Stressed (*known*) Stressed (*suspected*) Unknown	*Known:* Nutrients (Phosphorus); Priority Organics – (PCBs, Dioxin, Mirex) *Unconfirmed:* Pathogens	*Suspected:* Agriculture, Other Sources (migratory fish species) *Unconfirmed:* On-site Septic Systems
Oak Orchard Creek Middle - minor tributaries Ont. 138 - portion 3 From the Waterport Reservoir to Medina	Minor Impacts	Aquatic Life Recreation Fish Consumption Habitat/Hydrology Aesthetic	Stressed (*known*) Stressed (*suspected*) Unassessed Unknown	*Known:* Nutrients (Phosphorus) *Possible:* Pathogens	*Suspected:* Agriculture; Urban/ Storm Runoff; Combined Sewer Overflow *Possible:* On-site Septic Systems
(CAPITAL LETTERS indicate major pollutants/sources)					

Table 7 - Priority Waterbody List - Water Quality Impairments, con't.

Water Body	Category	Impaired Uses/Conditions	Severity	Type of Pollutant	Causes/Sources
Marsh Creek and tributaries Ont. 138 - 1	Minor Impacts	Aquatic Life Fish Consumption Recreation Habitat/Hydrology Aesthetics	Impaired (*suspected*) Stressed (*known*) Stressed (*unconfirmed*) Unknown	*Known:* Priority Organics – (PCBs, Dioxin, Mirex) *Suspected:* Nutrients (Phosphorus) *Possible:* Pathogens	*Suspected:* Agriculture; Other Sources (migratory fish species) *Possible:* On-site Septic Systems
Sandy Creek and tributaries; East and West branches and tributaries Ont. 130, 130 – 1 and 130-2	Minor Impacts	Aquatic Life	Stressed (*known*)	*Suspected*: NUTRIENTS *Possible:* D.O,/Oxygen Demand; pathogens	*Suspected:* AGRICULTURE *Possible:* On-site Septic Systems
Bald Eagle Creek and tributaries; Ont. 134	Needs to be verified	Recreation Aesthetics	Stressed (*possible)*	*Known:* ALGAL/WEED GROWTH (algal blooms) *Suspected*: NUTRIENTS, Oil and Grease *Possible:* Pathogens	*Suspected:* AGRICULTURE *Possible:* On-site Septic Systems
Source: NYSDEC.	***(CAPITAL LETTERS indicate major pollutants/sources)***				

of pathogens that result in periodic public bathing advisories and/or closures and nutrient levels that result in dense algal and plant growth (particularly in shallower nearshore areas), while fish consumption is impaired by contamination from past/historic discharges of organics (PCBs, dioxin) and pesticides (mirex).

These fish consumption advisories in Lake Ontario extend into the mouths of the creeks, as noted above. Aquatic life and recreation in the creeks are suspected to be stressed due to a variety of contaminants including nutrients carried in stormwater runoff and pathogens from failing on-site septic systems.

Section 303(d) of the Federal Clean Water Act also requires States to identify *Impaired Waters*, wherein specific designated or appropriate uses are not supported, requiring the development of a *Total Maximum Daily Load (TMDL)* or other restoration strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses to restore and protect such uses. A TMDL or other strategy is required for the western shoreline of Lake Ontario due to fish consumption advisories related to the known presence of sediments containing priority organics and pesticides.

- *The Great Lakes Restoration Initiative*

  The lands and waters of the Great Lakes are like no other place. In a world where fresh surface water is increasingly in demand, the region contains approximately 20 percent of it. Our expectation that the Great Lakes will continue to meet the needs of an ever-demanding world has resulted in lost flora, fauna, soil, air and water quality to the point where the ecosystem has shown signs of stress and its ability to keep up with demands is in doubt. While efforts have been undertaken to minimize harm, public demand for a new standard of caring has increased. This new standard is to leave the Great Lakes better for the next generation and to go beyond minimizing harm to proactively rehabilitating this ecosystem. Only then will the Great Lakes system be able to keep providing jobs and economic prosperity, recreation, and sanctuary. Understanding the needs, President Barack Obama, and the U.S. Environmental Protection Agency (EPA), in collaboration with 15 other federal agencies, made restoring the Great Lakes a national priority. In February 2009, the $475 million Great Lakes Restoration Initiative was established with an Action Plan to be executed from 2010 through 2014. Built upon the foundation of the Great Lakes Regional Collaboration Strategy, the GLRI was launched to accelerate efforts to protect and restore the Great Lakes. Beginning in 2010, the EPA awarded money from the GLRI fund for restoration projects in accordance with the strategies identified in the Action Plan. Through an update to this plan (GLRI Action Plan II) for fiscal year 2015-19, federal agencies have continued to use GLRI resources to strategically target the biggest threats to the Great Lakes ecosystem and to accelerate progress toward long-term goals for this ecosystem. These actions build on restoration and environmental protection work carried out under the first GLRI Action Plan, with a major focus on cleaning up Great Lakes Areas of Concern, preventing and controlling invasive species, reducing nutrient runoff that contributes to harmful/nuisance algal blooms and restoring habitat to protect native species. GLRI Action Plan III is currently being developed that will outline goals, priorities, and strategies for the Great Lakes system for 2020 through 2024.

- *The Great Lakes Water Quality Agreement*

  The Great Lakes Water Quality Agreement is a commitment between the United State and Canada to restore and protect the waters of the Great Lakes. This agreement was first signed in

1972 and provides a framework for identifying binational priorities and implementing actions to improve water quality. The EPA coordinates U.S. activities under this agreement. The agreement was amended in 1983 and 1987 and, in 2012, it was updated to enhance water quality programs that ensure the "chemical, physical and biological integrity" of the Great Lakes. Th2 2012 agreement facilitates U.S. and Canadian action on threats to water quality and includes strengthened measures to anticipate and prevent ecological harm. New provisions address water quality, aquatic invasive species, habitat degradation and the effects of climate change, and support continued work on existing threats to public health and the environment in the Great Lakes Basin, such as harmful algae, toxic chemicals, and discharges from vessels.

In 2016, in response to the 2012 Agreement commitments, the U.S. and Canada adopted phosphorus reduction targets for Lake Erie, and each country is developing domestic action plans to outline strategies for meeting these targets. As phosphorus loadings are recognized as a contributing factor to invasive algal blooms on Lake Ontario, an action Plan for the Lake is needed to help combat this problem in the WRA and surrounding region.

- *Permitted Discharges*

  Article 17 of the Environmental Conservation Law (ECL) entitled "Water Pollution Control" was enacted to protect and maintain the quality of valuable surface water resources. Article 17 authorized the creation of the State Pollutant Discharge Elimination System (SPDES) program to maintain New York's waters with reasonable standards of purity. The SPDES program, which is administered by the NYSDEC, is designed to eliminate water pollution and maintain the highest quality of water possible-- consistent with public health, public enjoyment of the resource, protection and propagation of fish and wildlife and industrial development in New York State. New York's SPDES program is approved by the United States Environmental Protection Agency for the control of surface wastewater and stormwater discharges in accordance with the Clean Water Act. However, the SPDES program is broader in scope than that required by the Clean Water Act as it controls point source discharges to groundwaters, as well as surface waters. Table 8 outlines NYSDEC permitted discharges in the WRA (see Maps 10A – C).

- *Vessel Waste*

  Pursuant to Clean Water Act Section 312(f)(3), the State of New York has determined that the protection and enhancement of the quality navigable surface waters in the State requires greater environmental protection. Therefore, as a key component of a larger strategy to protect water quality, the State has designated most coastal waters and connecting waterways as *Vessel Waste No Discharge Zones* (NDZ). Lake Ontario is a designated NDZ.

Table 8 – NYSDEC Permitted Discharges		
Facility Name	**Location**	**Receiving Waters**
Village of Lyndonville Water Treatment Plan	End of North Lyndonville Road, Town of Yates	Lake Ontario
Village of Lyndonville Wastewater Treatment Plan	Railroad Avenue, Village of Lyndonville	Johnson Creek
Heard Property	End Street, Town of Carlton	Lake Ontario
Lakeside Beach State Park	Lake Ontario State Parkway, Town of Carlton	Lake Ontario
Village of Albion Water Treatment Plant	End of Wilson Road, Town of Carlton	Lake Ontario
Oak Orchard State Marine Park	Point Breeze, Town of Carlton	Oak Orchard Creek
Black North Inn Restaurant	Point Breeze, Town of Carlton	Oak Orchard Creek
Orleans County Marine Park	Point Breeze, Town of Carlton	Oak Orchard Creek
Cottages at Troutburg	End of County Line Road, Town of Kendall	Lake Ontario

Source: NYSDEC.

Vessel Waste No Discharge Zones are locations where it is illegal to discharge on-board sanitary wastes from boats into surface waters; boaters are required to use appropriate vessel pump-out facilities, which are available at most marinas, to dispose of treated and untreated sewage waste. Sanitary waste from boats often contains harmful levels of pathogens and chemicals, such as formaldehyde, phenols, and chlorine, which severely harm water quality, pose a risk to public health, and impair marine life and habitats.

- *Stormwater Drainage and Non-Point Source Pollution*

Another primary impact to water quality in the WRA 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, soil and sediment, road oil and other automotive by-products, agricultural pesticides and fertilizer; and groundwater infiltration that carries 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 using best management practices (BMPs). Non- structural BMPs, such as reducing fertilizer and pesticide applications; and proper disposal of pet wastes, automobile waste oils, etc., are relatively inexpensive as compared to the costs of employing structural measures to mitigate pollution. Proper care and maintenance of on-site septic systems is another important measure for protecting water quality. Public Education is an important means of implementing best management practices that should be implemented throughout the WRA.

Phosphorus is carried in runoff from agricultural land and is an important component of non-point source pollution and can accelerate eutrophication of lakes and streams. Eutrophication is an ecosystems response to the additional of artificial or natural nutrients (mainly phosphates from detergents, fertilizers, or sewage) to an aquatic system. One example is algal blooms, which is the increase of phytoplankton in a waterbody as a response to increased levels of nutrients. Note that types of pollutants identified as causing water quality impairments to the surface waters in the WRA include nutrients and algal growth, and the suspected cause or source for each waterbody is agricultural. As agriculture is a significant industry in Orleans County, educational programs and other measures are needed to help reduce contaminant loadings to local creeks.

2.7.2 Wetlands and Habitats (see Map 8 A-C)

Wetlands (swamps, marshes, and similar areas) are areas saturated by surface or ground water sufficient to support distinctive vegetation adapted for life in saturated soil conditions. Wetlands serve as natural habitat for many species of plants and animals and filters for reducing excess nutrients from water that flows through them; they also absorb the forces of flood and tidal erosion to prevent loss of upland soils. The New York State Freshwaters Wetlands Act (6 NYCRR, Chapter X, Part 663.1) seeks to "preserve, protect and conserve freshwater wetlands and the benefits they provide, prevent the destruction and despoliation of freshwater wetlands, and to regulate use and development of such wetlands to secure their natural benefits, consistent with the general welfare and beneficial economic, social and agricultural development of the State".

There are two types of wetlands found throughout the Town - State designated freshwater wetlands and Federal jurisdictional freshwater wetlands. State wetlands are those regulated by the New York State Department of Environment and Conservation (NYSDEC) and are identified by the existence of certain species of vegetation that grow well in wet soils. The New York State Freshwater Wetlands Act (Environmental Conservation Law – Article 24) protects all wetlands of 12.4 acres (5 hectares) in area or larger. The State also regulates the land area within 100 feet of protected wetlands. Wetlands smaller than 12.4 acres may be protected by the State if they are considered to be of local importance. State wetlands are ranked in four classes ranging from Class I to Class IV. Regardless of the wetland

class, a permit is required to conduct any regulated activity within a wetland area or the 100-foot buffer area that surrounds the wetland.

- Class 1 wetlands provide the most critical of the state's wetland benefits, reduction of which is acceptable only in the most unusual circumstances. A permit shall be issued only if it is determined that the proposed activity satisfies a compelling economic or social need that clearly and substantially outweighs the loss of or detriment to the benefit(s) of the wetland.

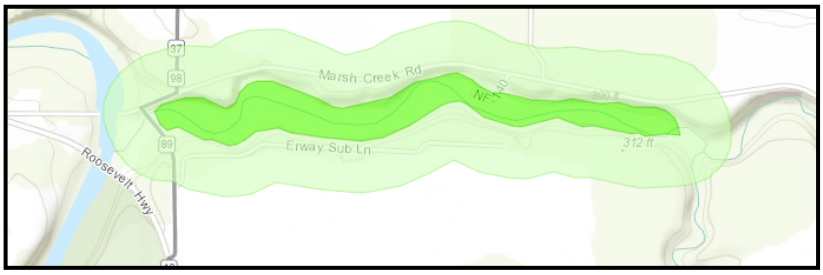
- Class II wetlands provide important wetland benefits, the loss of which are acceptable only in extremely limited circumstances. A permit shall be issued only if it is determined that the proposed activity satisfies a pressing economic or social need that clearly outweighs the loss of or detriment to the benefit(s) of the wetland.

The second type of wetlands are federal jurisdictional wetlands. Federal jurisdictional wetlands are regulated under by the U.S. Army Corps. of Engineers (ACOE) under Section 404 of the Clean Water Act, irrespective of their size, and Section 10 of the Rivers and Harbors Act of 1899. Many wetlands that are designated as State wetlands are also federal wetlands; however, most of the smaller wetland areas that do not meet the State's minimum size requirement are only federal jurisdiction. These areas, which are mapped by the U.S. Fish and Wildlife Service, are designated as wetlands based upon the presence of three features: hydric soils, wetland vegetation and specific hydrologic conditions.

Under the law, although there is no required setback or buffer area, a permit is required from the ACOE for any structure or activity that takes place in, under, or over a navigable waterway or wetland area located adjacent to navigable waters (such as dock construction, dredging, and shoreline protection). In addition, any land use or activity that involves a discharge of dredge spoil material or placement of fill material into navigable waters or associated wetlands requires a permit, as well as activities that would drain or flood wetlands or significantly disturb the soil (such as land clearing, ditching, stream channelization, and excavating). Certain activities that impact streams or streambeds, including impoundments and watercourse alteration, may also require the issuance of a Protection of Waters permit (Water Quality Certification) from the NYSDEC, pursuant to Article 15 of the Environmental Conservation Law.

As shown on Map 8 A-C, the only are of NYSDEC regulated wetlands found in the WRA are located along the lower reach of Marsh Creek. This Class I wetland area (KT-9) encompasses over 35 acres along an approximate one-mile stretch of the creek. There are numerous areas of federal jurisdictional freshwater wetlands found along the creek corridors throughout the WRA. Although shoreline

development, bulkheading and the installation of other shoreline protection structures, dredging and other stream modifications have impacted wetland habitat, there are still extensive areas of jurisdictional freshwater wetlands along the creek corridors that provide wildlife habitat, help to manage local flooding, and generate economic benefits.



Source: NYSDEC Environmental Resources Mapper.

- *State-Designated Significant Coastal Fish and Wildlife Habitats*

  As shown on Maps 8 A-C, there are three New York State Designated Significant Coastal Fish and Wildlife Habitats located within the WRA. These habitat designations were established by the NYSDEC in 1987, pursuant to 19 NYCRR 602.4. They include the Oak Orchard Creek habitat, which is located in the Town of Carlton; the Johnson Creek habitat, which extends through the Towns of Carlton and Yates; and a portion of the Sandy Creek habitat, which extends into the Town of Kendall. These habitat areas are described as follows. The full habitat narratives prepared by the NYSDEC are found in Appendix B.

New York State Designated Significant Coastal Fish and Wildlife Habitats in the WRA (Source: Orleans County Planning Dept.)

  - Oak Orchard Creek

    The Oak Orchard Creek Significant Coastal Fish and Wildlife Habitat is located in the Town of Carlton and extends approximately six miles in length, from the Waterport dam to the creek mouth at Point Breeze on Lake Ontario. This habitat area includes the entire stream

channel and associated islands and wetlands. It also includes an approximate two-mile segment of Marsh Creek, which is tributary to Oak Orchard Creek. Oak Orchard Creek is a very large, low to medium gradient, warmwater stream, with a predominantly rock and gravel substrate. The creek drains approximately 270 square miles of relatively flat agricultural land, rural residential land, and extensive inland wetlands. Below the Waterport hydroelectric dam, the creek flows through a steep-sided, undeveloped, wooded gorge where habitat disturbances are minimal. However, below the confluence of Marsh Creek (also an undisturbed stream segment), there has been considerable shoreline development, including marinas, seasonal and permanent residences, bulkheading and breakwalls that extend out into Lake Ontario. Sizeable areas of emergent wetland vegetation and submergent aquatic beds occur along the undisturbed portions of the shoreline along the lower reach of the creek.
Oak Orchard Creek is the largest creek corridor in Orleans County and is one of about ten major tributaries in the Great Lakes Plain ecological region of New York. Undisturbed tributary systems that provide habitat for major spawning runs by salmonids and other lake-based fish populations are especially important in this region. Beds of emergent and submergent aquatic vegetation in the creek contribute to the maintenance of fish populations and serve as valuable habitat for wildlife.

Oak Orchard Creek is particularly significant because large concentrations of Coho and chinook salmon and brown trout migrate from Lake Ontario into the creek each fall, from late August through December (primarily September to November), when salmonids ascend tributary streams to spawn. In addition, steelhead (lake-run rainbow trout) migrate into Oak Orchard Creek during the fall and between late February through April. These fish populations are the result of ongoing stocking efforts by the NYSDEC to establish a major salmonid fishery in the Great Lakes. Oak Orchard Creek also contains a diverse warmwater fishery. The area supports substantial reproduction by smallmouth bass, northern pike, rock bass, black crappie, brown bullhead, and largemouth bass. The creek also provides a limited smelt fishery in the spring.

The wetlands and undisturbed woodlands bordering Oak Orchard Creek provide valuable habitat for wildlife that are uncommon in the Orleans County coastal area. A variety of bird species inhabit the area including great blue heron, greenback heron, mallard and wood duck, belted kingfisher, marsh wren, common yellowthroat, red-winged blackbird, and swamp sparrow. During spring and fall migrations, Oak Orchard Creek and Marsh Creek serve as resting and feeding areas for locally significant concentrations of waterfowl. Other wildlife species that occur along the creek include furbearers, such as muskrat, mink, and raccoon.

The fish and wildlife resources associated with Oak Orchard Creek attract a significant amount of recreational use, although access to the creek is limited by steep banks and private land ownership. This is one of the most popular recreational fishing streams on Lake Ontario, due primarily to the large salmonid runs in the area. Fishing pressure is concentrated below the confluence with Marsh Creek and in the area immediately below Waterport dam. The intervening segment of the creek is often fished by small boat or canoe, especially for the abundant warmwater species in the area. Oak Orchard Creek attracts anglers from throughout New York State. Residents also utilize the area to a limited extent for waterfowl hunting and trapping.

Any activity that substantially degrades water quality, increases temperatures or turbidity, reduces flow, or alters water depths in Oak Orchard Creek would adversely affect the fish and wildlife resources in the area. These impacts would be especially detrimental during fish spawning and nursery periods (late February through July for most warmwater species a steelhead, and September through November for most salmonids). Wildlife breeding would also be impacted during the breeding seasons (April through July for most species). Discharges of sewage or stormwater containing sediments or chemical pollutants could adversely impact fish and wildlife species. Of particular concern are the potential effects of upstream disturbances, including water withdrawals, stream bed disturbances and effluent discharges. Hydro-electric facilities on the creek should only be permitted with run-of-river operations. Barriers to fish migration, whether physical or chemical, would have significant impacts on fish populations in the creek. Permanent disturbance of wetland vegetation, including submergent beds, through dredging, filling or bulkheading, would result in a direct loss of valuable habitat area. Enhancement of motorboat access to the area above the confluence with Marsh Creek could significantly increase human disturbance of the habitat, reducing its potential value to various fish and wildlife species. Existing areas of natural vegetation bordering Oak Orchard Creek should be maintained to provide bank cover, perching sites, soil stabilization and buffer zones.

- Johnson Creek

  The Johnson Creek habitat is located in the Towns of Carlton and Yates, extending approximately seven miles from the hamlet of Lakeside on Lake Ontario to the low dam at Patterson Pond (an impassable barrier) in the Village of Lyndonville. Johnson Creek is a relatively large, medium gradient, warmwater stream with gravelly substrate. The creek drains over 100 square miles of relatively flat agricultural and rural residential lands and is bordered along most of its length by woody riparian vegetation. Most of the land bordering the creek is privately owned, expect for the last mile which flows through Lakeside Beach

State Park. Habitat disturbances in the area are generally limited to discharges of agricultural runoff, road crossings and cottage develop0ment near the mouth of the creek.

Johnson Creek is the second largest stream in Orleans County and is one of ten major New York tributaries to Lake Ontario. The creek is primarily a warmwater fisheries habitat, with largemouth and smallmouth bass, northern pike, walleye, and white sucker being some of the species present. In the fall (late August through December), however, concentrations of Coho and chinook salmon enter the stream to spawn. Although these species are not stocked in Johnson Creek, they are stocked by the NYSDEC in Lake Ontario and many move into Johnson Creek during the fall spawning run. Other salmonids found in the creek during this period include brown trout and steelhead (lake-run rainbow trout). Anglers from throughout the region fish Johnson Creek. The fall salmonid runs attract most of the recreational use. Johnson Creek may have even greater recreational potential as the salmon fishery in Lake Ontario expands.

Any activity that degrades water quality, increases temperatures or turbidity, alters water depths, or reduces flows would adversely affect the fisheries resources in Johnson Creek. These impacts would especially detrimental during fish spawning and nursery periods (late February through July for most warmwater species and steelhead and September through November for salmonids). Discharges of sewage or stormwater runoff containing sediments or chemical pollutants (including fertilizers, herbicides, or insecticides) would adversely impact fish and wildlife species in the area. Of particular concern are the potential effects of upstream disturbances, including water withdrawals, stream channel alterations or effluent discharges. In the past, an upstream tributary (Jeddo Creek) was polluted with pesticide residues resulting in significant pollution of Johnson Creek and causing major fish kills. Discharges of toxic chemicals into the creek must be prevented in the future to avoid long-term adverse impacts on fisheries resources. Barriers to fish migration, whether physical or chemical, would also have significant effects on fish populations and their recreational use. Clearing of natural vegetation along Johnson Creek and other activities that may increase bank erosion or eliminate productive channel areas, would reduce habitat quality in Johnson Creek and should be avoided.

- Sandy Creek

  Sandy Creek is located in the Town of Kendall. It flows into the Town from the Town of Hamlin, in Monroe County to the east. This fish and wildlife habitat includes the creek channel and associated wetlands and islands, extending approximately fourteen miles from the mouth of the creek at Sandy Harbor to the confluence of the West and East branches of

Sandy Creek, just south of State Route 104. Sandy Creek is a relatively large, medium gradient, warmwater stream with a predominantly sand and gravel substrate. The creek drains approximately 90 square miles of relatively flat agricultural and rural residential lands and is bordered along most of its length by woody riparian vegetation. However, the lower three miles have been degraded by livestock grazing, shoreline development and the use of motorboats in the area.

Sandy Creek is one of about ten major New York tributaries to Lake Ontario. Despite a variety of habitat disturbances, the creek has significant spawning runs of Coho and chinook salmon in the fall (late August through December). Coho salmon and steelhead (lake-run rainbow trout) are stocked in the creek by the NYSDEC. Spawning runs occur as far inland as Albion on the West Branch and Holley on the East Branch, but actual populations levels in these upper reaches are not well documented. Brown trout occur in the lower reaches of Sandy Creek during the fall spawning season. Large and smallmouth bass migrate to the lake from the upper reaches of the creek. The streamside wetlands in Sandy Creek provide limited habitat for wildlife species.

Any activity that degrades water quality, increases temperatures or turbidity, alters water depths, or reduces flow would be detrimental during fish spawning and nursery periods (September through November for most salmonids). Discharges of sewage or stormwater runoff containing sediments or chemical pollutants (including fertilizers, herbicides, or insecticides) could adversely impact fish and wildlife species in the area. Efforts should be made to reduce stream disturbance by agricultural activities, especially grazing, through fencing and restoration of natural riparian vegetation. Stream channel alterations, including dredging, filling, or channelization, could reduce habitat quality in Sandy Creek. Barriers to fish migration, whether physical or chemical, would also have significant impacts on bass and salmonid populations in the creek. Wildlife species would be adversely impacted by human disturbance or elimination of wetland vegetation. Activities affecting any portion of Sandy Creek should be evaluated for potential impacts.

- *Lakewide Action and Management Plan*

  The Lake Ontario Lakewide Action and Management Plan (LAMP) is a bi-national plan to protect and restore the health of Lake Ontario by addressing the chemical, biological and physical stressors affecting the lake. Both the Niagara River and St. Lawrence River are included in the scope of the Lake Ontario LAMP. The Lake Ontario LAMP is led by the U.S. Environmental Protection Agency, Environment Canada, the NYSDEC, and the Ontario Ministry of the Environment. The LAMP guides the activities of these and other U.S. and Canadian federal, state,

provincial, and tribal agencies by establishing ecosystem goals, objectives, and indicators. There are several major issues affecting the health of Lake Ontario that the LAMP partners are working to address:

- *Degradation of the lower food chain* - As new species have been introduced to Lake Ontario, the lake's ecosystem, habitat, and food web have changed. The former dominant lake bottom species, the native shrimp-like crustacean *Diporeia*, was nearly eliminated from the lake following the arrival of zebra and quagga mussels. This important food source for lake trout remains rare in offshore areas of the lake.

- *Loss of biodiversity* - The biodiversity of the lake's ecosystem is affected by aquatic invasive species, nearshore water quality, shoreline development, and the effects of water level regulation on coastal wetlands.

- *Fish advisories and consumption restrictions* - Restrictions on the consumption of most sportfish in Lake Ontario continue because of chemicals, such as PCBs, dioxin and mirex. The New York State Department of Health issues an annual advisory on eating sportfish (and wildlife) because of potentially harmful levels of chemical contaminants. Current restrictions are noted in Table 9.

- *Aquatic invasive species* - The Great Lakes ecosystem has about 180 different invasive species, and reducing their impact is a challenge for the LAMP partners. Invasive species affecting Lake Ontario include zebra and quagga mussels, sea lamprey, the fishhook water flea, round goby, spiny waterflea, and phragmites.

- *Nearshore water quality* - Nutrients are vital to Lake Ontario's food web; however, nutrient levels that are too high can lead to excessive algae, including blooms of nuisance algae and potentially toxic blue-green algae.

The *Cooperative Science and Monitoring Initiative* (CSMI) is a bi-national effort that rotates through the Great Lakes on a five-year cycle, coordinating scientific monitoring and research to better understand the Great Lakes ecosystem. CSMI informs Great Lakes management programs, such as the Lakewide Action and Management Plans (LAMPs) and the Great Lakes Fishery Commission's Lake Committees, as well as provinces, states, and tribes in support of U.S. and Canadian Great Lakes Water Quality Agreement commitments. In 2013, the Lake Ontario effort took a collaborative approach to determine the source and fate of nutrients and food web production across trophic levels. The Lake Ontario effort included five research themes:

- The amount of phosphorus and nitrogen entering the lake and how these nutrients move through the food web;
- biological connections between nearshore and offshore areas of the lake;
- phytoplankton and zooplankton population dynamics and use of nutrients in the lower food web;
- fish production and population changes, diets, and distribution in different areas of the lake; and
- transfer of nutrients and energy through the food web of the lake.

This research will address management and research priorities for Lake Ontario, including nutrient loading and management, the role of invasive species, and the ability of the lake to sustain fisheries.

- *Invasive Species*

An invasive species is a plant or animal that is foreign to an ecosystem. During the past two centuries, invasive species have significantly changed the Great Lakes ecosystem. These changes have greatly affected the economy and health and well-being of people who rely on the system for food, water, and recreation. Invasive species have been identified as second only to habitat destruction as a cause of the decline of global biodiversity. They cause or contribute to habitat degradation and loss; the disruption of natural ecological processes; the loss of native fish, wildlife, and tree species; and the loss of recreational opportunities and income. Common invasive species found in the Lake Ontario watersheds include:

- Zebra and quagga mussels (invertebrates)
- Round goby (fish)
- Spiny water flea (crustacean)
- Rusty crayfish (crustacean)
- Eurasian water - milfoil (aquatic plant)
- Hydrilla (aquatic plant)
- Non-native cattails (plant)
- Common reed/phragmites australis (plant)
- Japanese knotweed (plant)
- Mugwort (plant)
- Shallow-wort (plant)
- Curly leaf pondweed (Aquatic plant)
- Water chestnut (aquatic plant)
- Purple loosestrife (Plant)
- Viral hemorrhagic septicemia (virus)
- Lamprey eel

The movement of species occurs naturally through migration patterns, from climatic events, and by other environmental factors. Natural movement of species outside of their natural range happens infrequently and occurs over the course of many years. Humans, however, have greatly contributed to the movement of species, primarily through economic and social activities. In

recent years, technological advancements, accelerated participation in world trade, and recreational activities have accelerated the pace of intentional and unintentional movement of species. Many species are introduced to new ecosystems, sometimes with disastrous results. According to the Ontario Ministry of Natural Resource's Aquatic Invasive Species Program, pathways for the introduction and spread of invasive species include:

- *Shipping* – large ocean-going vessels (e.g., commercial, naval and cruise ships) that operate in the Great Lakes and St. Lawrence River basin. Organisms are carried and released in ballast water or attach to the hull of vessels.

- *Recreational and commercial boating* – includes all watercraft (e.g., powerboats, personal watercraft, canoes and associated trailers and fishing equipment). Organisms can become attached to vessels and equipment and be transported between waterbodies, such as vegetation tangled in boat motors, mussels attached to hulls or live wells, and bilge water what contains plants, animals, and micro-organisms.

- *Movement of live bait* – the use of live or dead organisms, such as minnows, worms, leeches, and insect larvae, to catch fish. Live baitfish and other organisms unintentionally harvested (parasites, plant fragments and other non-target creatures) that are illegally released from bait buckets into waters from which they did not originate.

- *Aquarium and water garden trade* – the intentional release or unintentional escape of organisms, such as fish, plants, invertebrates, amphibians, and reptiles, which are used either indoors as aquarium pets or outdoors as elements of water gardens. These organisms can survive and reproduce; plants can spread to new areas through flood events or if discarded into a waterway at the end of the season.

- *Canals and other water diversions* – artificial connections are built for transport and for water diversion between or within watersheds. This provides an unnatural pathway for organisms to travel between waterbodies.

Monitoring aquatic ecosystems is critical to preventing, detecting, and reducing the spread and impact of aquatic invasive species that threaten waters in Lake Ontario. Educating landowners as to the proper control and eradication of invasive plant species is a critical part of maintaining watershed health. Identifying and removing invasive species is a vital aspect of restoring ecological health. Early detection and response is critical for their effective control. Another important, and often overlooked component, is the proper disposal of invasive plants. If not

disposed of properly they will only contribute to the spread of new infestations (e.g., in trash, not compost piles or waterways).

Once established in a new environment, invasive species are often difficult and expensive to eradicate. Although control efforts may be ineffective and costly, they are sometimes necessary to minimize or eliminate the impact of invasive species on the environment. Complete eradication of invasive plants may be desirable; however, this is not always feasible.

Controlling existing populations and preventing their spread in the WRA is a more practical and attainable goal. Control methods and timelines for treatment vary for each species. Therefore, consultation with the NYSDEC, the Western New York Partnership for Regional Invasive Species Management (PRISM – www.wnyprism.org) or New York Sea Grant is recommended.

2.7.3 Soils and Topography

Orleans County is underlain by sedimentary deposits of sandstone, siltstone, shale, dolomite, and limestone that was formed over 350 million years ago on the bottom of what was then Lake Iroquois. The WRA consists of a shale unite (Queenston formation) that can reach up to 1000 feet deep, yet depth from the ground surface can be only a few feet in some places.

The topography of the WRA in Orleans County, which is located in the Ontario Lake Plains, is characterized by gently to moderately sloping landforms. The lakefront often descends gently to the level of the gravel shoreline. In localized areas, the edge of the lakeshore rises abruptly in a bluff ranging up to 10 feet in height.

Soils near the lakeshore are dominated by the Collamer-Niagara Association on nearly level to sloping topography. These soils are deep, poorly to moderately drained, and have a seasonal high-water table. Seasonal wetness, moderately slow to slow permeability, and erosion hazards pose the primary limitations for farm use and development.

Inland along Johnson Creek, the Teel Wayland Association covers the floodplain with deep, moderately well-drained to very poorly drained soils. These soils are nearly level and have a seasonal high-water table often at or near the surface. Farm use and development are limited by the high-water table and susceptibility to flooding, yet the potential for recreational use is good.

The upper reaches of Oak Orchard Creek are dominated by two soil associations. The Hilton-Appleton Association is deep, moderately well-drained and somewhat poorly drained soils on nearly level to gently sloping topography. They exhibit a season high-water table perched generally above

the moderately slowly permeable substratum. Drainage is the main limitation for farm and non-farm uses, as much of this association is nearly level. The Alton-Phelps Association is located on nearly level, gravelly areas and is somewhat excessively drained to moderately well-drained. Slopes range from 0 to 8 percent, with some higher banks along certain portions of the creek. Soils have a temporary high-water table during wet periods. The course texture, droughtiness and season high-water table are the primary limitations for farming and development. Soils in this association have potential for fruit and vegetable crops, gravel pits and recreation.

2.7.4 Flooding (See Map 9 A-C)

Certain areas of flat terrain along the Lake Ontario shoreline and its tributary creeks are subject to flooding. The most serious problems occur along the lakeshore where there are no bluffs to provide protection. The flooding potential is an important consideration when guiding land use in these areas. Flooding seriously threatens property and lives. New development can also aggravate flooding by creating impermeable surfaces and by removing vegetation and increasing surface runoff.

The Federal Emergency Management Agency (FEMA) developed a series of Flood Insurance Rate Maps (FIRMs) for Orleans County communities. The WRA is covered by seven Community Panels Numbers: 3606450010B and 3606450005B for the Town of Yates; 3614590001B for the Village of Lyndonville; 3606430015B, 3606420010B and 3606420005B for the Town of Carlton; and 3606430005B for the Town of Kendall. The FIRM maps delineate the flood hazard boundaries (flood zones). These maps provide the basis for the implementation of the regular program phase of the National Flood Insurance Program within the Town. The FIRM maps for the Town of Yates were developed in September of 1978, mapping for Lyndonville was done in September of 1981, mapping for Carlton was done in November of 1978, and mapping for the Town of Kendall was done in May of 1978. There have been a few mapping amendments approved in each community since 2000 to remove structures from certain areas in the flood plain.

FEMA flood zones are established based upon the degree to which an area is susceptible to flooding and flood damage. The flood zones that exist within the WRA include:

- Lake Ontario shoreline – A1 zone
- Johnson Creek – A5 and A6 zones; some minor areas in B zone
- Oak Orchard Creek, below the Waterport hydroelectric dam – A8 zone
- Waterport Reservoir and the upper reach of Oak Orchard Creek – A3 zone
- Marsh Creek – A4 and A3 zones, a few small areas in B zone
- Bald Eagle Creek – A1 zone
- Sandy Creek within the Town of Kendall – A4 zone

Also known as the special flood hazard areas, the A1-A8 zones are the areas of land that would primarily experience still water flooding, without significant wave activity, during a 100-year storm event. In these zones, Base Flood Elevations or depths have been determined as indicated by the number shown on the FIRMs because detailed hydraulic analyses have been done in these areas. B zones are areas located between the boundaries of the 100-year and 500-year flood zone, or certain areas subject to 100-year flooding with average depths less than one-foot or where contributing drainage areas are less than one square mile in size. Lands located within the WRA that are not delineated at A or B zones fall within designated C zones, which are defined as areas with minimal flooding.

In order for property owners who own lands located in the A1 through A8 zones to take advantage of the National Flood Insurance Program (NFIP), communities must adopt federally approved floodplain management regulations to manage land use and development within the designated flood hazard areas. The Town of Kendall adopted Chapter 93 of their Town Code (Flood Damage Prevention Law) in March of 1987. The Village of Lyndonville also adopted Flood Damage Prevention regulations as Local Law #2 of 1987 on April 1, 1987. Yates and Carlton both adopted Flood Damage Prevention Laws as Local Law #1 on March 12, 1987 and June 11, 1987, respectively. Property owners within designated special flood hazard areas are eligible to receive Federal flood insurance, and federally insured mortgage funding is available to buyers.

Flood Damage Prevention laws are 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. These laws regulate development in special flood hazards areas and typically require the issuance of a Floodplain Development Permit for all construction and other development activities undertaken in areas of special flood hazard for the purpose of protecting the public from increased flood hazards and insuring that new development is constructed in a manner that minimizes exposure to flooding.

2.7.5 Erosion (Maps 9 A-C)

Certain sections of New York State's shoreline are vulnerable to coastal erosion through natural actions and human activities (including land development, shipping, boating, and recreation). Erosion is the loss or displacement of land along the shoreline due to the action of waves, currents, tides, wind-driven water, waterborne ice, and other storm impacts. It also means the loss or displacement of land due to the action of wind, runoff of surface waters and groundwater seepage. Other contributing factors that can significantly increase erosion include length of fetch, wind direction and speed, nearshore water depth, tidal influence, wave height and length, and the duration of storm events.

While natural events play a major role in the coastal erosion process, human actions can intensity the effects of these processes and speed up the rate of erosion. Humans contribute to the coastal erosion process by:

- removing or destroying shoreline vegetation and exposing bare soil to be easily eroded by wind, waves and precipitation;
- directing stormwater runoff over the top of stream banks or bluffs, causing these areas to erode;
- constructing "hard" structures along the shoreline that block the natural movement of sand and sediment;
- building structures that are intended to prevent coastal erosion in one area that may exacerbate erosion conditions on adjacent or nearby properties; and
- wakes from boats that produce excessive wave action along the shoreline.

The Lake Ontario shoreline also has areas of steep bluffs and high banks, as well as relatively flat stony beaches and nearshore areas. The rugged appearance and lack of vegetated cover on the bluffs along Lake Ontario is an indication of the severity of the wave and wind action from lake storms.

- *Shoreline Protection*

  The entire shoreline of Lake Ontario is subject to coastal erosion and has been designated by New York State as a Coastal Erosion Hazard Area (CEHA). CEHA designations are not applied to the creek corridors in the WRA. As noted, erosion along the lakeshore is the result of wave action, tides and currents that run along the shore, as well as wind-driven water and ice. Stormwater runoff from the upland areas and groundwater seepage also contribute to shoreline erosion in the area. The State requires that development and other activities within the CEHA be undertaken in a manner that minimizes damage to property and prevents the intensification of shoreline erosion. As necessary, such actions may be limited or prohibited to achieve these objectives.

  In vulnerable areas, coastal erosion causes extensive damage to public and private property and to natural resources. To mitigate long standing shoreline erosion along the lakeshore, various forms of shoreline protection are in place along many portions the Lake Ontario waterfront, particularly those that are subject to a greater extent of erosion. Many private properties are protected by seawalls, stone revetment, rip rap or rubble to protect the shoreline of the lake from erosion, especially in places where structures are closer to the waters edge. The most intensive erosion protection is found in areas shoreline cottages in the Town of Yates and the denser developed residential enclaves in the Towns of Carlton and Kendall, including Sunset Beach, Lakeside, Knapp Shores, Ed Rose Shores, the Lomond Parkway area and areas east and west of Bald Eagle Marina. There are also a few stretches of shoreline that remain natural and unprotected.

The construction or installation of erosion control structures in the CEHA is regulated by the NYSDEC pursuant to Article 34 of the Environmental Conservation Law. Pursuant to 6 NYCRR, Part 505 (the implementing regulations for Article 34), a permit is required for all proposed activities that are regulated in the CEHA (see Appendix C). The construction, modification or placement of any structure that would materially alter the condition of the shoreline, including grading, excavating, dumping, dredging, filling or any disturbance of soil is a regulated activity that requires a permit. The Town of Kendall is the only KYCL community that has an adopted local CEHA law (Chapter 59 of the Kendall Town Code), which enables the Town's Code Enforcement Officer to be more actively involved in permitting and the installation of erosion protection structures. It should be noted that any locality that adopts a local Article 34 law cannot weaken the regulations. The NYSDEC will work with local communities to provide assistance and ensure that they are properly regulating structures and issuing permits.

The area extending 25 feet landward from the top of the bluff is considered the Natural Protective Features Area (natural protective features include bluffs, dunes, beaches, and nearshore areas). Structures are not permitted to be located within this setback area. As shown on Maps 9 A-C, there are portions of the Lake Ontario shoreline that have erosion recession rates that vary between one inch and two inches per year. These areas have been designated as Structural Hazard Areas. This areas includes the western extent of the Town of Yates, west of Marshall Road; the Green Harbor, Sunset Beach and Lakeside Beach State Park areas, west of Point Breeze and the Lake Shore Road and Jones Beach areas east of Point Breeze in the Town of Carlton; and Knapp Shores and Ed Rose Shores areas, and the entire stretch of shoreline from Center Road east to Troutburg, at County Line Road in the Town of Kendall. Many of these areas are fortified with various types of erosion protection structures. As a result of significant flooding that occurred in the spring/summer of 2017 and 2019, new structures are being installed in some of the hardest hit areas.

The boundary for structural hazard areas starts at the inland boundary of the natural protective features area, with the full width of the area determined by the estimated rate of recession (the long-term average of one or more feet per year multiplied by 40). Therefore, in a few areas where erosion has been more extreme, the building setback can extend up to 100 feet or more back from the shoreline (in addition to the 25-foot natural protective area setback). Although no homes in the area are known to be in eminent danger, there are areas where residential structures are situated relatively close to the lake.

While shoreline hardening may provide temporary relief from erosion in areas subjected to intense lake storms and significant wave action or current, structural measures are expensive to

install, degrade shoreline habitat, interrupt natural shoreline processes, and may act to transfer erosion problems to adjacent areas. The NYSDEC discourages the use of seawalls because they do not dissipate wave energy properly and typically cause erosion in downdrift areas along the shoreline. Additionally, the wave action of the lake undermines the shoreline and overtime, can act to weaken existing seawalls and bulkheading in places where it is not well constructed. It is not uncommon to see structures fail during severe storm events. The NYSDEC stresses the importance of maintaining shoreline structures to ensure their long-term integrity.

It should be noted, that in certain locations and where possible, alternative shoreline management techniques should be considered for use as a first or next step for erosion protection, whenever possible. Examples of alternative measures for protecting the shoreline include bioengineering techniques and planted buffers that utilize deep rooted vegetation. These alternative solutions can result in a more naturalized shoreline, which has ecological and aesthetic benefits. Hard structural erosion protection measures should be used where there is a documented erosion problem and where alternative measures have been proven to be inadequate to protect the principal use. In certain places along the Lake Ontario shoreline, particularly those areas experiencing higher annual erosion rates, warrant the use of hard structures, primarily rock revetment, due to intensive wave action that has powerful erosive capacity. The planting of vegetation behind the revetment is highly encouraged, as it can help with water absorption, but these plantings alone will not provide adequate protection along these areas of the lake.

Aside from the flooding and erosion experienced as a result of the extreme weather conditions in 2017 and 2019, shoreline erosion has not been particularly severe along the lakeshore. Nonetheless, intense storms that bring large amounts of rainfall can (and do) have an impact. The springtime is the most vulnerable period when the ground can become very saturated. Experience in the area has also shown that erosion is more prominent where poor stormwater drainage in the upland area overburdens the bluff. Surface runoff is a considerable problem. When the soil becomes saturated at the top of bluffs it can exacerbate their failure, particularly if they are being impacted and undermined by wave action at the toe along the shoreline. Although the Code Enforcement Officer can only recommend that existing homeowners implement drainage improvements to help prevent erosion, newly built structures should be required to employ drainage measures to ensure that stormwater discharged from gutters and sumps is properly managed and not conveyed toward or over the bluff and down to the lake shore. Residents can install plantings above the top of bluffs to help absorb stormwater flows. French drains are also recommended. The NYSDEC can provide guidance to help property owners protect their lands.

- *Lake Ontario Water Levels*

Coastal flooding and erosion on the Great Lakes occurs when strong wind and storms increase water levels, particularly during the winter and spring. Lake Ontario is located at the eastern end of the five great lakes system, receiving flow from the other lakes as the system drains to the St. Lawrence River and ultimately, the Atlantic Ocean.

The water level in Lake Ontario is influenced by inflow received from the drainage basin surrounding the Lake (watershed areas), as well as inflow contributed from the upper great lakes, in particular Lake Erie, which contributes 85 percent of the total inflow of water to Lake Ontario. However, water depths in Lake Ontario are also affected by the regular diversion of lake water for the St. Lawrence Seaway Power Project (Moses-Saunders Dam), which is located between Massena, New York and Cornwall, Ontario, at the eastern end of the lake.

Source: International Joint Commission; August 2017,

The International Joint Commission was established under the Boundary Waters Treaty of 1909 to help the United States and Canada prevent and resolve disputes over the use of the waters that the two countries share. Its responsibilities include considering applications for project that affect the natural levels and flow of boundary waters, such as the Moses-Saunders Dam. In 1931, New York Governor Franklin D. Roosevelt signed the Power Authority Act, allowing for the

development of the St. Lawrence River for power use. In 1952, President Dwight D. Eisenhower approved a hydroelectric dam for the river; in October of 1952, the International Joint Commission (IJC), authorized construction of the dam and a navigational lock. In 1956, the IJC established the International St. Lawrence River Board of Control, as a mechanism for regulating the river, above and below the dam. At that time, criteria were established for managing water levels and flow.

Natural factors, including precipitation, wind, and evaporation, along with surface water runoff, are among the primary drivers of water levels in Lake Ontario and the St. Lawrence River. The management of water levels has provided substantial benefits to the region by reducing flooding and erosion along the Lake Ontario shoreline and providing more favorable conditions for water intakes, recreational boating, commercial navigation, and hydroelectric power generation. However, current day water levels and flows were still being managed according to criteria developed in the 1950's, which relied upon water supplies to Lake Ontario that were recorded between the 1860's and 1950's. The IJC recognized that the region's population, economy, mix of water uses and scientific knowledge were different today than they were over 60 years ago or more, and will be different in the future from what they are today. With an understanding that data, technology and knowledge of the cause and effects of fluctuating water levels are far superior today than what they were in the 1950's, the IJC decided to study an updated approach for managing water levels and flow. The intent of this approach could reflect what has been learned since the early implementation of the water level and flow regulation plan, and include a system to monitor social, economic and environmental impacts of water level regulation, as well as the effect of global climate change on water supplies and storm events, to be more responsive to the region's diverse and changing needs. The new approach was realized as Plan 2014, which is a new regulation plan for determining and managing water levels and flows in Lake Ontario and the St. Lawrence River.

Starting in 2000, extensive scientific study, public engagement and governmental review was conducted. Between 2000 and 2006, technical experts and stakeholders worked together to build evaluation models and tested hundreds of alternatives, with public involvement throughout the process. The IJC continued to evaluate and optimize the alternatives that resulted from the five-year Lake Ontario-St. Lawrence River Study, holding public meeting in 2012 and public hearings in 2013. The IJC issued an order of approval for Plan 2014 in December of 2016, to replace the outdated system for regulating flows that was developed in the 1950's. The IJC instructed the International St. Lawrence River Board of Control to set water levels and flows in accordance with the Plan 2014 recommendations, beginning in January 2017.

The sixteen years of study and review indicated that the existing regulation plan and criteria for managing water levels and flow has altered the natural patterns of water level fluctuations on Lake Ontario and the upper St. Lawrence River, and has severely stressed coastal wetlands, which are essential for the well-being of the lake and river ecosystems. The old regulation plan reduced the diversity of plant life in wetland areas and disrupted the cycles of wetland rejuvenation, creating conditions that favor areas dominated by cattails. Water level patterns have a direct influence on the breeding and nesting success of marsh birds, fish and amphibians that inhabit wetland areas. Re-establishing a more diverse ecosystem can better resist impacts from environmental threats such as pollution and invasive species, which have taken a toll on the lake and river.

Since the implementation of Plan 2014 was commenced in January 2017, the region experienced record-breaking rainfall (April to June 2017 and May 2019, surpassing 2017 flood levels), which has had a severe impact on the Lake Ontario and St. Lawrence River system. A combination of factors caused unprecedented flooding and erosion, including:

- an unusually mild winter and wet weather,
- above normal inflow from the upper great lakes,
- a record setting spring "freshet" in the Ottawa River basin (sudden rise in water levels from heavy rain and/or snow-ice melt), and
- heavy rainfall across the Lake Ontario and St. Lawrence River system that continued through spring and early summer in 2017 and 2019.

Water enters Lake Ontario from the Niagara River and the St. Lawrence River from the Ottawa River; in addition to stormwater runoff that entered the entire system from watershed drainage throughout the region, all coming in much faster than it could be emptied. This results in significant flooding and erosion along the Lake Ontario shoreline, particularly the south shore of the lake, and in the Lake St. Louis area around Montreal, where water levels rose even higher above normal than in the lake. IJC representatives explained that as more water was released through the dam from the lake, it caused water levels to significantly rise in the Montreal area.

The Board of Control adjusted water levels in the lake in response to the rainfall impacts in 2017 and 2019 (the Board increased outflow 17 times and reduced it 13 times between April 5 and early May 2017 alone). It is a balancing act as conditions continually change. It becomes more about how much water is coming into the system, and the rate of increase, rather than how much is being released, and lake level adjustments were being made based on Plan 2014 guidance and the judgment of the Board of Control. With the agency facing the highest water levels since 1993,

demands for the prevention of flooding and erosion were high. A State of Emergency was declared by the Governor of New York State both years, allowing the NYSDEC to issue emergency permits for flood and erosion protection. While many blame the Plan 2014, the IJC indicated that the extreme wet weather was the primary cause of the problems on Lake Ontario, noting that the lake water levels would be within inches of where they were at the height of the crisis each year had the 1950's regulation plan not been changed. As spring is typically the rainy season, recent events set a good example for the IJC Board of Control to use for addressing future extreme water level fluctuations and regulation. Political pressure has come to bear forcing the Board to allow a continued release of water beyond Plan 2014 criteria.

New York State committed more than $100 million to rebuild communities along the Lake Ontario shoreline that were devastated by flooding in 2017, only to experience record high water levels and flooding again in those same communities in 2019. In 2019, in response to these events, the Governor's office established the Resiliency and Economic Development Initiative (REDI), recognizing that high water levels on the lake are the new normal and that continuing to rebuild to the same standard is foolish. This multi-agency task force was charged with developing a plan to redesign and re-envision infrastructure along Lake Ontario's waterfront with different protections to respond to inevitable factors of the future, while strengthening the resiliency of the region's local economies that are heavily dependent on summer tourism. As a part of this effort, the New York State Department of State developed a series of maps to help communities understand the potential severity of flooding and erosion and the areas where such action may occur. The REDI maps for the KYCL towns show the potential for extreme flood and erosion hazards along the Lake Ontario shoreline and the creek corridors, with a high level of severity extending further inland, outside the WRA.

There is no long-term solution for flooding and erosion as the Lake Ontario shoreline is actively changing and will continue to do so well into the future. Thus, the YYCL communities need to continue to work with the NYSDEC and Orleans County to help property owners understand the natural processes of the lake, act to keep existing shoreline protection maintained, plant vegetation as needed along the top of bluffs and behind (upland of) stone revetments, and locate structures a safe distance from the shore. Property owners also need to recognize that permanent docks and other such structures are subject to future impacts and storm damage. The Towns could provide information at the town halls and on their websites, and public workshops could be coordinated with the County and NYSDEC to educate property owners on shoreline erosion, coastal processes and hazards, and proper construction and maintenance of shoreline protection structures. With the advent of climate change, helping property owners to understand and take proper measures to prepare for and prevent storm damage is essential.

2.7.6 Environmental Hazards and Constraints

There are no known inactive hazardous waste sites within the WRA. The waterfront has no history of industrial or wide-scale commercial use. The area has traditionally been used for farming, recreation, and residential development.

2.8 Historic, Cultural and Scenic Resources

2.8.1 Historic Sites and Structures

Long before European and, then American, settlers incorporated these communities, members of the Iroquois Confederacy inhabited these lands and waterways, utilizing the bountiful natural resources located within them as the basis for their subsistence. Due this rich history, the WRA has numerous sites of archaeological, historical, and scenic interest.

The Town of Yates was incorporated in 1822 and was named in honor of the New York State governor, Joseph C. Yates. The Town of Carlton was originally incorporated as the Town of Oak Orchard in 1822. It was renamed in 1825 after Sir Guy Carleton, who served as the Governor of Quebec (Canada) from 1786 to 1796. The Town of Kendall was incorporated in 1837 and was named in honor of Amos Kendall, who served as the U.S. Postmaster General from 1835 to 1840.

The review of historic, cultural, and scenic resources for this document was completed with information gathered from the New York State Office of Parks, Recreation and Historic Preservation's Cultural Resource Information System (CRIS), the respective websites for each WRA community (and town historians), and the Orleans County Historical Association (OCHA). The review of the NYSOPRHP's CRIS (Cultural Resource Information System) revealed no buildings, structures or sites within the WRA that are listed on the National Register of Historic Places, but suggested that there are six buildings, structures or sites within the Town of Carlton portion of the WRA that would be eligible for listing on the National Register of Historic Places. A group of five residences near the intersection of Point Breeze Road and Marsh Creek Road, identified collectively by the NYSOPRHP as the Point Breeze Road Historic District (USN # 07303.000042), were determined eligible for listing on the National Register. This grouping of houses dates to late nineteenth century and offers several fine examples of Italianate and Greek Revival styles of domestic architecture. Also, as noted above, the Lake Ontario State Parkway, which extends into Carlton, is eligible for listing on the National Register.

There are numerous other buildings and structures located in the Town of Carlton that, judging on preliminary evaluations conducted through a desktop review and windshield survey, which would

most likely be determined eligible for listing on the National Register of Historic Places if a formal determination of eligibility was made by the NYSOPRHP. Orleans County does have an historical association (founded in 1977) and, given the age of the housing stock within the County, it is likely that there are historically significant buildings and structures located throughout the area that could be designated as local districts and landmarks. However, none have been officially designated.

In 2016, NYSOPRHP determined that the Lake Ontario State Parkway was eligible for listing on the National Register, under Criteria A (significant contribution to the broad patterns of our history) and C (embodying the distinctive characteristics of type, period, or method of construction). The determination of eligibility noted that the parkway was the only NYS parkway built in the Genesee Valley region and was the only completed portion of the larger parkway originally envisioned by Governor Franklin Delano Roosevelt, which was to span from the mouth of the Niagara River on Lake Ontario to the Thousand Island region. Construction of the parkway began in the 1940s and was completed in the 1970s. The Lake Ontario State Parkway features many of the character defining features of parkways that were first developed in New York State during the 1920s. Its hallmarks include: curvilinear route design, rusticated roadside buildings and structures, landscaped medians, and rusticated guardrails. The parkway provides a link between the Town of Irondequoit in Monroe County and Lakeside Beach State Park in the Town of Carlton.

The Town of Yates has provisions within its Zoning Law (Chapter 560 of the Town Code) for the designation of historic landmarks and historic districts and review procedures for work to be completed within such districts/on such landmarks, although the zoning map (as amended in 2007 and shown on the Town's website) does not show any such properties located within the Town. The zoning code notes "the purpose of the Historic District or Landmark is to preserve certain areas or sites of historical or cultural significance in the Town of Yates. Development in these areas should be consistent with the architectural, cultural, or historic character of the area." Properties (lots and parcels) that are located within a designated historic district or are individually designated landmarks are subject to the provisions outlined in the code for such resources and the underlying zoning in which the property is located.

The Village of Lyndonville (located within the Town of Yates) has the following definition for historic landmarks and historic districts in its zoning code: "Any area in the Village identified as a site of historical or cultural significance with certain rules or regulations governing both land and structures therein." The zoning map for the Village of Lyndonville (as displayed on the Village's website) does not display any historic districts or historic landmarks located within the Village. Orleans County does have a historical association (founded in 1977) and, given the age of the housing stock within the Town and the Village of Lyndonville, there is a high likelihood that there are many

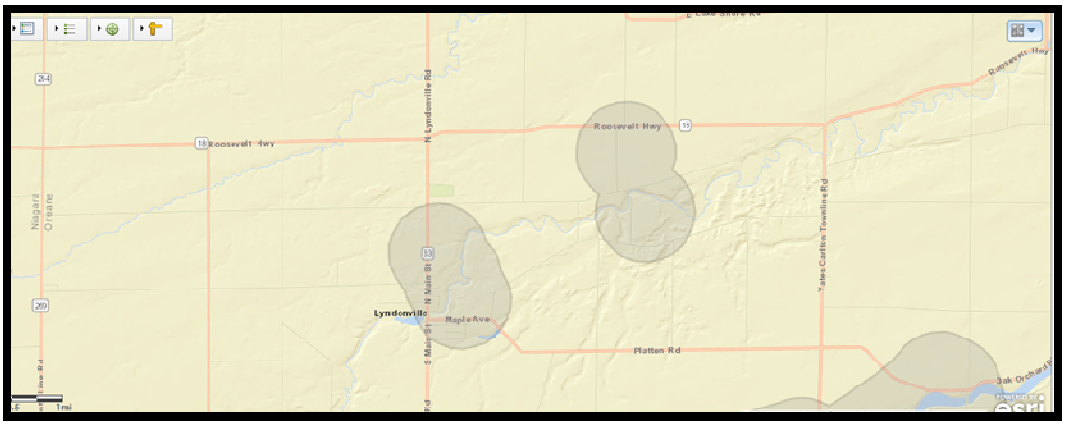
historically significant buildings and structures located throughout the Town and the Village that could potentially be designated as a local districts and landmarks.

2.8.3 Archaeological Resources

There are several State designated Archaeologically Sensitive Areas (ASA) located throughout the WRA. ASAs are established by the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP) whenever a known archaeological site is located within a half-mile radius. In addition, archaeological surveys have been completed in many parts of the WRA in relation to both individual site developments and transportation and infrastructure related improvement projects. When surveys are completed as part of a project, the area would be categorized as an ASA in the event that any significant resources were found.

Known archaeological sites are deliberately not mapped, to protect their integrity from vandalism, looting, and/or theft. The NYSOPRHP should be consulted prior to conducting any site development activities within the WRA, to assess the potential for archaeological resources prior to beginning construction or site development activities to avoid costly project delays. The NYSOPRHP should be consulted prior to conducting any site development activities within the WRA, to assess the potential for archaeological resources prior to beginning any site development activities.

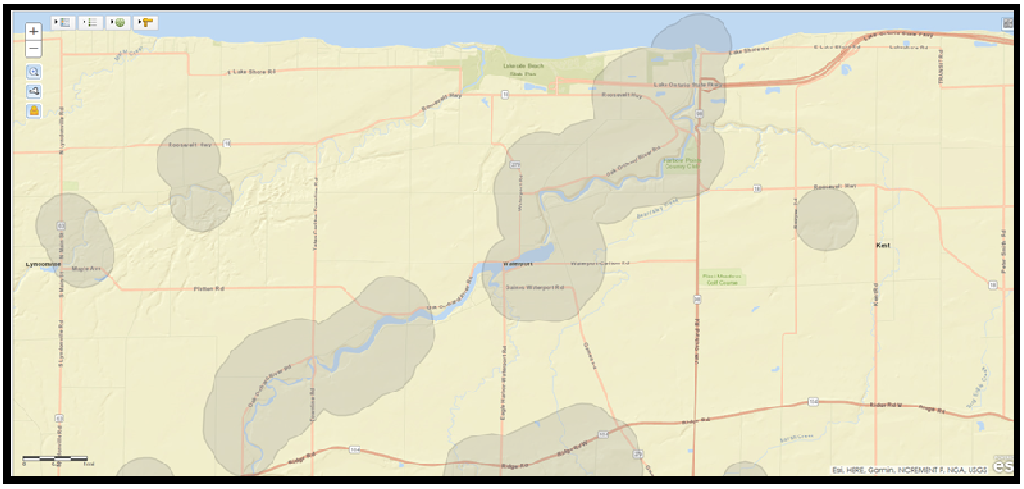
Archaeological Sensitive Area - Yates (and Village of Lyndonville)



There are two primary Archaeologically Sensitive Areas (ASA) located within the Town of Yates that also fall within the WRA. The first ASA encompasses much of the Village of Lyndonville (flanking Main Street/State Route 63) and the second ASA is located between Johnson Creek and State Route 18 (Roosevelt Highway). ASAs are established by the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP) whenever a known archaeological site is located within 0.50-mile radius. In the graphic below the primary ASAs located within the Town of Yates (and

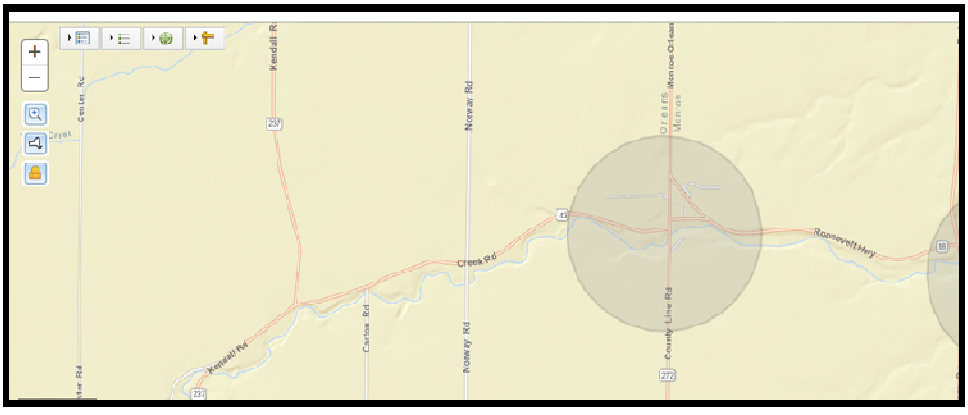
within the WRA) are displayed with grey, shaded circles representing the radius within in which archaeological sites may or may not be located.

Archaeological Sensitive Area – Carlton



Virtually the entire portion of the Oak Orchard River flowing through the Town is located within a state designated Archaeologically Sensitive Area (ASA), from its mouth in Lake Ontario to the Gaines Town line. ASAs are established by the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP) whenever a known archaeological site is located within 0.50-mile radius. In the graphic below the primary ASAs located within the Town of Carlton (and within the WRA) are displayed with grey, shaded circles representing the radius within in which archaeological sites may or may not be located.

Archaeological Sensitive Area - Kendall



There is one Archaeologically Sensitive Area (ASA) within the WRA in the Town of Kendall. It is located near the intersection of Monroe Orleans County Line Road (State Route 272) and Creek Road (State Route 43) on Sandy Creek. In the graphic below, the ASA located is displayed with grey, shaded circles representing the radius within in which archaeological sites may be located.

2.8.4 Scenic Resources (Maps 7A-C)

There are no Scenic Areas of Statewide Significance (SASS) within the WRA, as designated by the Secretary of State (SASS's are currently limited to six areas in the Hudson River Valley and on Long Island). Although not formally designated, the scenic resources within the WRA are spectacular. Numerous locations in the project area provide glimpses of unspoiled farmlands, wetlands, creeks, rivers, and woodlands. Dramatic vistas of Lake Ontario and its shoreline are a major scenic resource within the WRA, and there are many scenic locations along Oak Orchard Creek and the other streams that run through the WRA. Some specific scenic resources within the WRA include the following:

- *Lake Ontario Vistas*

  The shoreline of Lake Ontario can be viewed from several locations, including Lake Ontario State Parkway, Route 18, and several northerly oriented roads. Area parks, such as Lakeside Beach State Park and Yates Park, as well as the marina at the mouth of Oak Orchard Creek also offer spectacular panoramic views of the lake. Views are also available at Point Breeze and Shadigee.

- *Oak Orchard River Gorge*

  The Oak Orchard River Gorge extends from the Waterport hydroelectric dam to the vicinity of Orleans County Marine Park. It is a scenic corridor that offers scenic views of steep wooded cliffs. The Oak Orchard Creek meanders through this landscape at the bottom of 50-foot cliffs. The most dramatic views are available by boat. The lands surrounding the creek are mostly in private ownership, and landside viewing opportunities are limited. The Orleans County Marine Park does offer an overlook of the gorge.

- *Waterport Dam Area*

A subarea of the Oak Orchard Creek Gorge, the Waterport Hydroelectric Dam area offers views of the waterfall located adjacent to the dam. The area below the dam is a popular fishing location. The lands west of the creek remain in their natural state, contributing to the visual character of the area. There are opportunities for improved public access on the east side of the dam in this location. Erie Boulevard Hydropower LP Brookfield Power, who operates the dam for Brookfield Renewable Partners (the owner), does not allow viewing access to the falls from the west side of Oak Orchard Creek (and Clarks Mills Road) because of the limited landholdings and dangerous cliffs and steep embankments around the falls.

- *The Three Bridges*

The Three Bridges is a fishing hamlet at the confluence of Oak Orchard and Marsh Creeks. Originally, there were three bridges, but one was removed due to its deteriorated condition. It offers a unique character, with views of the bridges, the water confluence and boating activity. It is a transitional area between the more developed recreational assets to the north, and the natural landscapes upstream. It is a popular locating for fishing. Public parking is limited, and recent flooding has impacted area docks.

There are several scenic trail resources that extend through the WRA. These are discussed as follows.

- *NYS Great Lakes Seaway Trail*

State Route 18 (Roosevelt Highway) and Lake Ontario State Parkway are both components of the NYS Great Lakes Seaway Trail and designated as National and State Scenic By-Ways. The Great Lakes Seaway Trail is a 454-mile scenic route that stretches across 10 counties that parallel Lake Erie, the Niagara River, Lake Ontario, and the St. Lawrence River. Designated as a National

Recreation Trail, this route is intended for use by car, RV, tour bus, or bicycle. Green and white markers are posted along the trial to guide travelers who journey along the shoreline.

The Seaway Trail follows the Lake Ontario State Parkway to Lakeside Beach State Park, then continues westerly on Route 18. As a limited access highway, opportunities to pull-off and take advantage of the views are limited on the Lake Ontario State Parkway. The County is currently conducting a study to improve access on the Lake Ontario State Parkway.

Audubon Niagara Birding Trail

- *Audubon Niagara Birding Trail*
  The Buffalo Audubon Society has identified a regional birding trail that extends 115 miles from the shores of Lake Erie, along the Niagara River, and along the shore of Lake Ontario east into

Orleans County. The easterly portion of this birding trail passes through the Town of Yates. The Buffalo Audubon Society notes that "the Niagara River is the first site in North America to be identified bi-nationally as an Important Bird Area (IBA). The binational IBA was dedicated by the National Audubon Society, Canadian Nature Federation, American Bird Conservancy, and Bird Studies Canada on December 11, 1996." Brochures highlighting features along this trail are available from the Audubon Society.

2.9 Public Infrastructure (Map 10 A-C)

2.9.1 Water Supply

There are areas that are serviced with public water supply in the Town of Carlton, the Town of Yates, the Town of Kendall, and the Village of Lyndonville. Map 10 depicts where waterlines and water intake and treatment infrastructure are located within each community. In general, denser areas of residential development along the shoreline and in the Village are served by public water mains. In areas without public water, residents depend upon individual groundwater wells. There are no water storage facilities located within the WRA.

The Village of Lyndonville operates a 10-inch diameter intake pipe that extends 800 feet into Lake Ontario and a water treatment plant in Shadigee, at the northern end of Lyndonville Road (NYS Route 63). In 2017, the facility produced 67,418,000 gallons of water, or an average of approximately 184,700 gallons per day (gpd); the plant has the capacity to produce 400,000 gpd.

The Village of Lyndonville water district serves approximately 1,050 people through 425 service connections, according to the 2017 Annual Drinking Water Quality Report. The Village also provides water to the Town of Yates Water District #4 which served an estimated 1,883 people in 2017, through 787 water service connections. A small portion of the Town of Yates is served by Yates Water District #2, which obtains its water from Niagara County (the Niagara River). This system serves 172 people through 67 service connections.

The Village of Albion, which is located outside the WRA, receives its potable water supply from Lake Ontario. The Village operates a 24-inch diameter intake pipe that extends 1,500 feet into the lake and a water treatment plant that is located on the lakeshore, adjacent to terminus of Wilson Road in the Town of Carlton. This system serves residents of the Village of Albion and a number of other communities, including the Town of Carlton. The Village of Albion plant produced 500,598,000 gallons of water in 2017, for an average daily production of 1,371,500 gpd. The Annual Water Quality Report indicates that residents of the Town of Carlton used approximately 67,342,440 gpd.

2.9.2 Wastewater Management

Most areas within the WRA depend upon private systems, such as septic tanks, to address wastewater management. There are public sewers in the Village of Lyndonville, and the Village operates a sewage treatment plant. The Troutburg area of Kendall is served by a private wastewater treatment facility that has additional capacity. All other areas within the WRA are served by individual systems.

2.9.3 Stormwater Management

Stormwater drainage in the WRA is managed through a combination of closed pipes and open ditches. Neither Orleans County nor the individual communities regulate stormwater discharges.

2.9.4 Other Utilities

Other utility services available in the waterfront area include electric, telephone and natural gas. Cable and satellite television service is also provided by private carriers.

2.9.5 Transportation Systems

The WRA is serviced by several roadways that provide access throughout the waterfront. This includes State, County, and local roadways. There are no public transportation services or active railroad lines in the WRA.

The primary County road in the WRA is Lake Shore Road, which extends from west to east from the Somerset/Yates town line in the Towns of Yates to the western boundary of Lakeside Beach State Park in the Town of Carlton. This roadway picks up again in the Town of Carlton, running east from State Route 98 in Point Breeze to the Orleans/Monroe County line in the Town of Kendall. Lake Shore Road primarily serves residents and provides access to local fire lanes that service lakeshore cottages and residential enclaves.

New York State highways in the WRA include:

- *Lake Ontario State Parkway*
  Lake Ontario State Parkway (LOSP) is a major east-west corridor that extends 125 miles from Lakeside Beach State Park in Carlton, through the Town of Kendall, to State Route 390 in Monroe County. This limited access highway has five interchanges in Orleans County and is restricted to non-commercial traffic unless by permit from the NYS Office of Parks, Recreation and Historic Preservation. It represents the southern boundary of the WRA from the State Park in the Town of Carlton, through the Town of Kendall to the County line.

The LOSP and State Route 18 are the area's links to the New York Great Lakes Seaway Trail system. Both highways are seasonal use route, as indicated by large fluctuations in traffic volume during peak and off-peak periods. During the summer season traffic nearly doubles the off-peak volumes of Spring and Fall.

The LOSP represents a substantial barrier for public access to the Lake Ontario shoreline. The parkway is not a heavily traveled roadway and sections of this highway, particularly in Orleans County, are in poor condition. It is not unusual for the State to close the portion from Lakeside Beach State Park to State Route 98 in the winter due to its condition. Although the NYS Department of Transportation repaved a seven-mile section from State Route 237 in the Town of Kendall to State Route 19 in Hamlin the remainder of the highway in the WRA needs to be repaved, particularly the ten-mile stretch from Route 98 in the Town of Carlton to State Route 237. Other improvements are also needed to provide greater public access, improve upkeep, and reduce overall maintenance for the parkway.

Orleans County officials and planners from the Genesee Transportation Council (GTC) are in the midst of a study that aims to determine the best use for parts of the parkway if it isn't repaired in full or otherwise improved. Considerations include the possibility of closing the two northernmost lanes (at least for a portion of the parkway) and recapturing that land for public access to the lake and increased recreational uses, including picnic spots, scenic overlooks and/or multi-use trails. This Steering Committee overseeing this project has identified these concerns among others, including reducing the number of bridges, improved landscape upkeep, reduced maintenance costs, additional natural habitat, and the inclusion of wayfinding signage to support nearby tourism and businesses. These considerations, along with other public input, are being evaluated as part of a feasibility study that is being prepared by the project consultant retained by the GTC. This study begins with the need to investigate the potential for repurposing the parkway while continuing to address vehicle demand along the corridor and considers opportunities for reconnecting with the waterfront and capitalizing on views afforded by the LOSP to open new opportunities to capture additional tourism and economic development. The study evaluates various alternatives for parkway improvements.

- *State Route 18*

  Route 18 (also known as Roosevelt Highway) extends east from the Town of Somerset in Niagara County, through the Towns of Yates, Carlton, and Kendall, and into Monroe County. Route 18 forms the southern boundary of the WRA where it runs south of Lakeside Beach State Park, continuing as this boundary to the Bridges area, where it turns south and runs concurrent with State Route 98 to the intersection with Park Avenue, east of Oak Orchard Creek. At this point

Route 18 heads to the east away from the WRA. The portions of Route 18 that run through Yates and into the Town of Carlton, to where this highway intersects with the entrance to the LOSP and Lakeside Beach State Park, are segments of the New York Great Lakes Seaway Trail.

- *State Route 63*
  Route 63 originates in the Village of Wayland in Steuben County, to the south, extending west and north into the Town of Yates. Route 63 enters the WRA at the south boundary of the Village of Lyndonville, where it passes through the Village as Main Street and then North Lyndonville Road, Route 63 continues north as a State highway to the intersection with State Route 18. At this point it becomes a County road, continuing north and terminating at the former site of the Yates Town Pier on the Lake Ontario shoreline in the hamlet of Shadigee.

- *State Route 98*
  Route 98 extends north from the Village of Arcade, in Wyoming County, through the City of Batavia and into the Town of Carlton. Route 98 forms the eastern boundary of the WRA at the intersection with Park Avenue, just east of Oak Orchard Creek, and continues north as Oak Orchard Road. It continues north as Point Breeze Road on the north side of Marsh Creek in the Bridges area. Route 98 continues north as Point Breeze Road (and the eastern boundary of the WRA) to the intersection with the LOSP. Here it changes jurisdiction to a County road and continues north to Point Breeze hamlet at the Lake Ontario shoreline.

- *State Route 279*
  Route 279 originates in the Town of Gaines, extending in a northwest direction from Oak Orchard Road (Route 98). Only a small section of this roadway extends through the WRA. It enters the WRA at its intersection with Waterport-Carlton Road, moving north across the Waterport bridge and over the Lake Alice reservoir to Oak Orchard River Road. At this point it continues north and out of the WRA.

- *State Routes 237 and 272*
  Small sections of Route 237 (Kendall Road) and Route 272 (County Line Road) extend north to the LOSP in the Town of Kendall. Both roadways continue to the lakeshore under County jurisdiction. Route 237 originates in the Town of Stafford in Genesee County, to the south, and Route 272 starts at Ridge Road (State Route 104) in the Town of Murray.

Overall, there is a lack of alternative travel options in the WRA. There are no multi-use trails outside of the State Parks. Multi-use trails should be considered from prominent roadways that lead to the

Lake Ontario shoreline, particularly along State Route 63 from the Village of Lyndonville to Shadigee and Route 98 in Carlton, as well as the Lake Ontario State Parkway.

2.9.6 Emergency Services

- *Emergency Response Management*

  The Orleans County Emergency Management Office (EMO) provides service throughout Orleans County through planning, training, response, mitigation, and recovery for all natural and man-made hazard incidents. In a disaster, the emergency manager serves as the key representative and advisor to the County Chief Administrative Officer. In Orleans County, emergency management duties are assigned to coordinators who combine their functions with other responsibilities, such as Fire and Emergency Medical Service Coordinator. EMO performs these tasks by interfacing with all first response, local, State and Federal agencies, as well as the coordination of the recovery elements of these agencies to minimize the effects of emergencies on the population and infrastructure of Orleans County.

  The EMO staff includes: a Director of Emergency Management, who is responsible for implementing the Orleans County Comprehensive Emergency Management Plan; a Fire Coordinator, implements the Fire Mutual Aid Plan and administers the provision of fire training by the NYS Office of Fire Prevention and Control to ensure that fire personnel receive basic and advanced courses to better prepare them to respond to both day to day and large incidents; an EMS Coordinator who oversees the provision of emergency medical services training and certification and reviews and updates the EMS Mutual Aid Plan annually; three Deputy Fire Coordinators who provide rapid assistance to local fire agencies to assist in coordinating various resources that may be required; the Fire Advisory Board that makes recommendations to the County Legislature on improving the training and response to fire related issues; and the EMS Council, which is a statutory board made up of representatives of the Emergency Medical Service in Orleans County that makes recommendations to the Legislature on improving the training and response to EMS related issues.

  The Orleans County Emergency Management Office has the responsibility to update and maintain the 800MHz radio system that is utilized by all agencies in Orleans County for voice communications. The system is comprised of the backbone infrastructure and 1100 end user radios. The system is used for all day to day operations from fire, law enforcement, EMS to local highway departments. The perform origin and cause determination investigations for nearly every fire that occurs in Orleans County, and provide counseling to members of the first response community that have been involved in calls that cause them anguish.

The EMO also interfaces with the National Weather Service to secure weekly weather projections and spot forecasts during severe weather events; and the American Red Cross to ensure human sheltering during times of disaster. The regional chapter maintains shelter agreements at various locations in Orleans County and at the request of the EMO Director will open shelters to provide food and lodging for displaced citizens.

- *Police Services*

  The Orleans County Sheriff's Department patrols the waterfront areas and respond to emergencies in the WRA. The Orleans County Sheriff's Office offers Road Patrol and Marine Enforcement. This department is assisted by the New York State Police, as needed. The Road Patrol Division has a command staff of three Sergeants, who supervise 17 patrol Deputies. The Chief Deputy also supervises two Criminal Investigators with one Juvenile Aid Officer. The road patrol has the task of enforcing State, County, and local laws throughout the County and along the 739 miles of public roadways. They investigate both criminal and civil complaints and all types of domestic disputes. They respond to intrusion alarms and investigate a variety of vehicle accidents. Sheriff's Office Patrol Services is also responsible for the Marine Enforcement Unit, which operates annually during the boating season.

  The Orleans County Marine Enforcement Unit is staffed by one full-time and nine seasonal deputies, all of whom are NYS Certified Law Enforcement Officers. One patrol deputy is a certified S.C.U.B.A. diver. The Marine Unit maintains two vessels that patrol approximately 24 miles of Lake Ontario shoreline and the adjacent coastal waters. A third vessel patrols the Lake Alice reservoir. An additional Jet Boat vessel was recently acquired and is particularly useful in shallow bodies of water. If necessary, any of the three smaller boats can be trailered to other bodies of water throughout the county, including the Erie Canal and Glenwood Lake.

  Orleans County experiences a significant increase in boater activity in the summer, as the annual tourist population and many residents and other visitors enjoy use of the beautiful lakes and waterways. The primary responsibilities of the Marine Unit include boater safety education and Boater Safety Certification courses, vessel inspections, investigation of crimes and incidents that occur on local waterways, search and rescue operations, boater assistance, pollution control response and enforcement of the NYS Navigation Law. The Orleans County Sheriff's Marine Unit is funded in part by reimbursement of NYS boater registration fees, which are provided by the New York State Office of Parks, Recreation, and Historic Preservation.

- *Fire Services*
  Fire protection within the WRA is provided by local volunteer fire companies. Orleans County Fire Department operates nine fire stations that provide volunteer service. Two of these stations, Lyndonville, and Kendall, are located within the WRA. The Carlton Fire Company also operates two fire stations, one in Albion and one in Waterport. These fire companies provide fire protection and emergency medical services to their respective service areas.

2.10 Existing Authorities and Jurisdictions within the WRA

In general, the authority for the regulation of structures and uses above the mean high-water line in New York State is granted to local municipalities. This is enacted locally through zoning, subdivision, and other land use related ordinances.

State regulatory authority rests principally with the NYSDEC for activities such as disturbance of the bed or banks of a protected stream or watercourse; construction, reconstruction or repair of dams and other impoundment structures; construction, reconstruction or expansion of docking and mooring facilities; excavation or placement of fill in navigable waters and their adjacent and contiguous wetlands; and water quality certification for placing fill or undertaking activities resulting in a discharge to waters of the United States, pursuant to:

- ECL Article 24 – Freshwater Wetlands, for permits for activities proposed withing mapped, State-regulated wetland areas or within a 100-foot wide adjacent area. Permit issuance standards are contained in the NYSDEC regulations found at 6 NYCRR Part 663.5.
- Section 401 of the Clean Water Act for Water Quality Certification. NYSDEC has responsibility for issuing or denying Water Quality Certificates for the Army Corps. of Engineers under Section 404 – Nationwide Permits.

In addition to direct permitting authority, NYSDEC also consults with the NYSDOS, the NYSOPRHP and OGS as part of its review of permit applications. Under some permit procedures, specific consent must be obtained from one or more of these agencies in order for NYSDEC to issue a permit or, in the case of NYSDOS, NYSDEC must ensure that its permits or other actions are consistent with the NYS Coastal Management Program (CMP) policies and provisions. Local governments are also asked to provide comments on proposed projects that required permits in their respective WRAs.

Coordination with the OGS Bureau of Land Management is required for projects involving the use of underwater lands. Underwater land, as defined by OGS, includes lands currently or formerly under water.

Additionally, structures, including historical fill materials, docks, piers, or other structures, located in, on or above State-owned underwater lands are regulated under the Public Lands Law.

The OGS Bureau of Land Management has the authority to convey interest in real property for the use of State-owned underwater lands. This includes transfer of property through easements, as well as leasing of property through licenses and collection of fees. Therefore, any landowners (typically the upland owner) interested in utilizing State-owned underwater lands for any purpose need to contact the OGS to determine what the requirements may be for the property in questions.

The OGS maintains current information on applications and permitting processes on their land management webpage. This information includes:

- Joint application forms and application instructions for permits or determinations from the ACOE or New York State to undertake activities affecting streams, waterways, surface waterbodies, wetlands, shoreline areas and sources of water supply.
- Petitions for a License, Easement or Permit for docks, wharves, commercial marinas, and other permanent structures.
- Petitions for Grants (fee title).
- Petitions for Easements for Pipelines or Cables.

Federal authority rests with the ACOE under Section 10 of the Rivers and Harbors Act 64 of 1899 and Section 404 of the Clean Water Act. Under Section 10, a permit is required for any structure or work (including dredging and the placement of fill) that takes place in, under or over navigable waters, or any wetland adjacent to navigable waters. Under this regulation a permit is required to place any dock, mooring, boat ramp, permanent inlet, spud or jack-up barge, or any other structure within or over waters regulated by the ACOE. Under Section 404, a permit is required for activities that involve the discharge of dredged or fill material into a water of the United States, including wetlands.

Discharge activities that will drain or flood wetlands or significantly disturb the soils of a wetland also required a Section 404 permit. Some Federal permits require concurrence or consent from New York State agencies. In particular, Federal permits in the coastal zone require concurrence from NYSDOS indicating that the project is consistent with CMP policies; Federal Section 404 permits required the issuance of a Water Quality Certification from NYSDEC.

Some areas within the WRA, while not owned by a particular agency or authority, are required to abide by specific regulations set forth by agencies and authorities with jurisdiction. Agencies and authorities may manage resources through regulatory requirements such as permitting and other forms of

compliance. Consultation with these agencies and author5ities may be required as necessary for obtaining approval for specific projects. Consultation should be carried out during planning and prior to implementation of a project.

Federal agencies and authorities manage a wide range of resources related, but not limited, to the environment, safety, social justice, and water use (Table 9). New York State agencies manage a wide range of resources related, but not limited, to the environment, transportation, safety, economic development, cultural resources, and recreation (Table 10). Section VI of the LWRP provides a complete list of actions and programs of State and Federal agencies and authorities that may have jurisdiction within the WRA and could impact or be impacted by the approval or implementation of the KYCL LWRP.

Table 9 – Federal Agencies and Authorities

Agency/Authority	Managed Resource
Army Corps. of Engineers	Federal waters; public works; environment
Environmental Protection Agency	Human health and environmental quality
Fish and Wildlife Service	Fish, wildlife, and natural resources
Federal Emergency Management Agency	Flooding and erosion
Federal Energy Regulatory Commission	Energy; cables and pipelines
Coast Guard	Maritime interests and environments; navigation
Department of Homeland Security	Border regulation and immigration
Department of Transportation/Federal Highway Administration	Transportation related activities

Table 10 – State Agencies and Authorities

Agency/Authority	Managed Resource
Department of Agriculture and Markets	Agricultural business and agritourism; education
Canal Corporation	Canal system, tourism, economic development
Department of Environmental Conservation	Environmental protection
Department of Health	Public health
Office of Parks, Recreation and Historic Preservation	Parks, historic sites, natural resource protection
New York Power Authority	Public power, electricity, and natural gas
Public Service Commission	Electric and natural gas transmission facilities
Department of State	Waterfront revitalization and coastal consistency, economic development, disaster recovery
Department of Transportation	Highway, railways, ports

Regional agencies and authorities in the area also manage a range of resources related, but not limited, to transportation and land use planning. Table 11 provides a list of certain entities with jurisdiction within the WRA.

Table 11 – Regional Agencies and Authorities

Agency/Authority	Managed Resource
Orleans County Planning Department	Land use planning
Orleans County Public Health	Public health
Orleans County Public Works	County highways
Orleans County Soil and Water	Water quality and resource protection
Orleans County Tourism	Economic development and recreational tourism
Genesee Transportation Council	Long-range transportation planning
Rochester-Genesee Regional Transportation Authority	Public transportation

Local agencies and authorities include Town Building Departments who manage local land use planning efforts as related to the waterfront and resources in the WRA.

SECTION III Local Waterfront Revitalization Program Policies

The Kendall-Yates-Carlton-Lyndonville Local Waterfront Revitalization Program (LWRP) policies and sub-policies, collectively referred to as "policies" and presented in this section, consider the economic, environmental, and cultural characteristics of a community's waterfront. The policies represent a balance between economic development and environmental preservation that will permit beneficial use of, and prevent adverse effects on, coastal resources. They also represent the enforceable policies of the New York State Coastal Management Program for the Towns and Village waterfront revitalization areas, pursuant to this LWRP. The policies are comprehensive and reflect the Towns and Villages' concerns; they will be enforced through the use of State laws and authorities, and local laws and regulations (a listing of local laws that support implementation of the LWRP policies is included in the Appendix). The policies are the basis for Federal and State consistency determinations for activities affecting the waterfront area.

The 44 policies outlined in the following pages contain an explicit statement of State policy, followed by a more detailed explanation of that statement. In certain instances, the State policy statement may be followed by locally specific sub-policies and/or the policy explanation may include guidelines to be used by State and local agencies in their decision making. While the policies are enforceable as a matter of State and local law for reviews conducted under the federal Coastal Zone Management Act, the explanatory narrative for each policy is for descriptive and directory purposes only. It is important to note that no policy applies to the exclusion of any of the others.

The Kendall-Yate4s-Carlton-Lyndonville Local Waterfront Revitalization Program policies include the following.

- Developed Waterfront Policies – Policies 1 Through 6
- Fish and Wildlife Policies – Policies 7 Through 10
- Flooding and Erosion Hazard Policies – Policies 11 Through 17
- General Policy – Policy 18
- Public Access Policies – Policies 19 And 20
- Recreation Policies – Policies 21 And 22
- Historic and Scenic Resources Policies – Policies 23 Through 25
- Agricultural Lands Policy – Policy 26
- Energy and Ice Management Policies – Policies 27 Through 29
- Water and Air Resources Policies – Policies 30 Through 43
- Wetlands Policy – Policy 44

Development Policies

Policy 1: Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

Policy 1A: Promote uses that serve as a catalyst to private investment and are compatible with the character of the surrounding area.

Policy 1B: Maintain, and where needed, redevelop public roadways in the coastal area.

Explanation of Policy

State and federal agencies must ensure that their actions further the revitalization of waterfront areas. Examples of governmental means of spurring economic growth include the transfer and purchase of property; the construction of a new office building; development of a public highway or park; and the provision of tax incentives to businesses. When any such action or similar action is proposed within the Kendall-Yates-Carlton-Lyndonville (K-Y-C-L) Local Waterfront Revitalization Area (coastal area), it must be analyzed to determine if the action would be a benefit or detriment to waterfront revitalization efforts.

Revitalization of abandoned, underutilized, and deteriorated waterfront areas is one of the most effective means of encouraging economic growth in these areas without consuming undeveloped lands and valuable open space outside of the waterfront. Waterfront redevelopment is also one of the most effective means of rejuvenating or at least stabilizing residential and commercial districts adjacent to the redevelopment area.

In responding to this policy, these other LWRP policies must be considered:

1. Uses requiring a location abutting the waterfront must be given priority in any redevelopment effort. (Refer to Policy 2 for the means to effectuate this priority);
2. As explained in Policy 5, one reason for revitalizing abandoned, underutilized and deteriorated waterfront areas is that the costs for providing basis services to such areas is frequently less than providing new services to areas not previously developed, and areas of more concentrated revitalization should occur where public services exist to support such development;
3. The likelihood for successfully simplifying permit procedures and easing certain requirements (Policy 6) will be increased if a discrete area and not the entire waterfront is the focus for this effort. In turn, ease in obtaining permits should increase developers' interest in investing in these areas. Furthermore, once this concentrated effort has succeeded, stabilization and revitalization of surrounding areas is more likely to occur.

Local governments through waterfront revitalization programs have the primary responsibility for implementing this policy. Though local waterfront revitalization programs need not be limited to redevelopment, local governments are urged to identify areas as suitable for redevelopment and revitalization and establish and enforce redevelopment programs.

1. When a Federal, State, or local action is proposed to take place in an area of the K-Y-C-L Waterfront Revitalization Area that has been identified as suitable for redevelopment, the following guidelines will be used:

    a. Priority should be given to uses that are dependent on a location adjacent to the water (see Policy 2);
    b. The action should enhance existing and anticipated uses;
    c. The action should serve as a catalyst to private investment in the area;
    d. The action should improve the abandoned or deteriorated condition of a site and, at a minimum, must not cause further deterioration. For example, a building could not be abandoned without protecting it against vandalism and/or structural decline;
    e. The action must lead to development that is compatible with the character of the area, with consideration given to scale, architectural style, density, and intensity of use;
    f. The action should have the potential to improve the existing economic base of the community and, at a minimum, must not jeopardize this base. For example, waterfront development meant to serve consumer needs would be inappropriate in an area where no increased consumer demands were expected, and existing development was already meeting demand;
    g. The action should improve adjacent and upland views of the water, and, at a minimum, must not affect their availability or the quality of existing views;
    h. The action should have the potential to enable multiple uses of the site.

2. If a State, Federal or local action is proposed to take place outside of the underutilized waterfront area suitable for redevelopment, and is either within the relevant community or adjacent coastal communities, the agency proposing the action must first determine if it is feasible to undertake the action within an identified deteriorated, underutilized waterfront area. If such an action is feasible, the agency should consider undertaking the action in such an area. If not feasible, the agency must take the appropriate steps to ensure that the action does not cause further deterioration of that area.

Improvements have been undertaken within the coastal area that have resulted in the revitalization of underutilized lands for public benefit. For example, investments at Point Breeze in the Town of Carlton, along the lower reach of Oak Orchard Creek, have created significant waterfront assets for the region.

Such improvements provide improved public access to Oak Orchard Creek and Lake Ontario shoreline, enabling water-related recreation and enhancing public enjoyment of the waterfront. These investments, which increase the area's tourism offerings, have also improved the local economy. Similar efforts at the mouth of Eagle Creek in the Town of Kendall now provide dockage, refuge, and support services for recreational boating. Continued improvements in this area will enhance public benefits.

Future investments are needed in certain areas of the coastal area, including the area in the vicinity of the dam at Patterson Pond in the Village of Lyndonville. The dam itself is old and failing; the Village must work with the County and State to identify appropriate remedies and funding sources to ensure that this dam is properly restored/realigned and maintained in working order. The Village owns the land on the north and south sides of the dam that are used by fisherman to access the dam area and Johnson Creek. The parcel on the north side is supported by an old stone block wall that needs refurbishment. The parcel on the south side needs improvement to enhance creek access and public use on the upland.

Patterson Pond also needs improvement. The pond has filled with sediment that is adversely affecting its water depth, storage capacity, ecological quality, and public use. The pond has the potential to provide opportunities for water-related recreation and public enjoyment and needs to be dredged to improve its physical condition. The Village owns approximately 4.3 acres of land along the south shoreline of Patterson Pond that is also vastly underutilized (likely due to access problems that need to be remedied) and has the potential for public use as a local park, fishing area and tourist attraction. Improving this area picnicking, fishing, non-motorized boating, and other passive activities is warranted and encouraged. The preparation of a master plan for the future use and enjoyment of the Patterson Pond area is recommended as there are several parcels of land owned by the Village that should be planned for in a coordinated fashion. Working with the County and State, use opportunities and funding sources should be identified to help achieve this plan.

The Village of Lyndonville owns a number of adjoining parcels of land along Johnson Creek that is also underutilized and has the potential to be improved for water-related and other recreation opportunities. The land area is located in the vicinity of the municipal wastewater treatment plant and has ample area for parking. It is currently a popular location for shoreline fishing. Here again, the Village should develop a master plan for these lands to identify the types and location for various recreational activities, including fishing, hiking, picnicking, and other passive pursuits.

The Town Pier and Town Park areas in the Town of Yates are two areas that are not being utilized to their full potential. The pier is located at the terminus of North Lyndonville Road on Lake Ontario. This site should be improved as a location for small-scale picnicking, scenic viewing of the lake and passive enjoyment. Yates Town Park is located along the Lake Ontario shoreline at the end of Power Lane and is

immediately adjacent to a large area of vacant land that is owned by the Town and has the potential for public use as an extension of Yates Town Park. As the park has the capacity to support additional use, such as a boat launch or other recreational amenities, and the adjoining land offers additional opportunities, the Town should prepare a master plan to guide the future use of this area. Working with the County and State, use opportunities and funding sources should be identified to help achieve this plan.

The Bridges area on Oak Orchard Creek in the Town of Carlton is an area that is underutilized and somewhat deteriorated. It supports a number of water-dependent uses and support services for recreational fishing on the creek. The area is located at the intersection of Oak Orchard River Road, Point Breeze Road and Oak Orchard Road. There were two bridges in the area; one that current existing along Roosevelt Hwy. (Route 18 – just south of the intersection) and one that formerly carried Oak Orchard River Road over the creek. The Town needs to evaluate this area for revitalization and identify measures and potential funding sources to re-establish a node of commercial activity in this area to support the local fishing industry. It the Oak Orchard River Bridge is proposed for reconstruction, whether to service vehicular traffic or as a pedestrian or multi-use trail facility, existing restrictions on boating in the Oak Orchard Creek gorge should be maintained to protect and preserve critical fish resources and shoreline habitat. Additionally, revitalization of older, deteriorating structures along upper reaches of Oak Orchard Creek is needed.

Lakeside Beach State Park is located in the Town of Carlton. This facility offers camping and other active and passive recreational activities. Although the Park attracts visitors, it is underutilized. The Town of Carlton and Orleans County must work with the State to keep the existing facilities well maintained, and to evaluate the local and regional benefits of adding additional recreational amenities, in particular facilities for swimming.

There are a number of County and State roadways that service the coastal area. These roads are utilized by residents, as well as others moving through the region, and receive heavier usage during the summer season. The agencies that have jurisdiction over these roadways must ensure that they are well maintained and suitable for public. In particular, Lake Ontario State Parkway must be properly renovated and maintained as determined by the State and local assessment.

Policy 2: Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.

Policy 2A Promote the siting, development and/or expansion of water-related recreational uses along the waterfront and in adjacent upland areas, including uses that provide for swimming, fishing, boating, as well as facilities that enhance those uses.

Explanation of Policy

There is a finite amount of waterfront space suitable for development purposes. Consequently, while the demand for any given piece of property will fluctuate in response to varying economic and social conditions, it is reasonable to expect that long-term demand for waterfront space will intensify. The traditional method of land allocation is the real estate market, which offers little assurance that uses that require waterfront sites will, in fact, have access to the shoreline. To ensure that such "water-dependent" uses can continue to be accommodated within the K-Y-C-L Waterfront Revitalization Area, federal, state and local governmental agencies will avoid undertaking, funding, or approving non water-dependent uses when such uses would preempt the reasonably foreseeable development of water-dependent uses. Furthermore, agencies will utilize appropriate existing programs to encourage the siting of water-dependent uses and activities at waterfront locations, where feasible.

Water-dependent activities shall not be considered a private nuisance, provided such activities were commenced prior to the surrounding activities and have not been determined to be the cause of conditions dangerous to life or health and any disturbance to enjoyment of land and water has not materially increased.

A water-dependent use is an activity which can only be conducted on, in, over or adjacent to a water body because such activity requires direct access to that water body, and which involves, as an integral part of such activity, the use of the water. The following uses and facilities are considered as water-dependent:

1. Uses that depend on the utilization of resources found in local surface waters, such as fishing or water treatment facilities;
2. Recreational activities that depend on access to Lake Ontario or its tributaries (for example: swimming, fishing, boating, wildlife viewing);
3. Uses involved in the sea/land transfer of goods (for example: docks, loading areas, pipelines, short-term storage facilities);
4. Structures needed for navigational purposes, such as dams, navigation channels and devices, lighthouses, or locks);
5. Flood and erosion protection structures, such as breakwaters, seawalls and bulkheads;

6. Facilities needed to store and service boats and ships (for example: marinas, boat repair facilities, boat storage);
7. Uses that require large quantities of water for processing, cooling, or power generation, such as processing plants and dams;
7. Scientific/educational activities that, by their nature, require access to coastal waters (for example: certain meteorological and oceanographic activities); and
8. Support facilities that are necessary for the successful functioning of permitted water-dependent uses (for example: parking lots, snack bars, first aid stations, short-term storage facilities). Although these uses must be near the water-dependent use they support, they should, as much as possible, be sited inland from the water-dependent use rather than directly on the shore.

In addition to water-dependent uses, those uses that are enhanced by a waterfront location should be encouraged to locate along the shoreline, though not at the expense of water-dependent uses. A water-enhanced use is defined as a use or activity that does not require a location adjacent to or over coastal waters, but whose location on land adjacent to the shore adds to the public use and enjoyment of the water's edge. Water-enhanced uses are primarily recreational, cultural, retail or entertainment uses. A restaurant that uses good site design to take advantage of a waterfront view is an example of a water-enhanced use.

If there is no immediate demand for a water-dependent use in a given area, but a future demand is reasonably foreseeable, temporary non-water-dependent uses should be considered preferable to a non-water-dependent or enhanced use that involves an irreversible or nearly irreversible commitment of land. Parking lots, passive recreational facilities, outdoor storage areas, and non-permanent structures are uses or facilities which would likely be considered as "temporary" non-water-dependent uses.

The four LWRP communities, Orleans County and New York State should protect, maintain and, where appropriate, expand existing water-dependent recreational uses, including uses at Lakeside Beach State Park. Preference shall be given to waterfront locations in the Point Breeze, Bridges and Waterport areas in the Town of Carlton for the location or expansion of water-dependent uses. Water-enhanced uses in the coastal area primarily include parks located on or near the shoreline of Lake Ontario or the tributary creeks, as well as trails and other entertainment uses near the shoreline. These uses enrich the local tourism base and support economic activity in the area and should be expanded in appropriate locations as long as they do not take preference over water-dependent uses.

In the actual choice of sites where water-dependent uses will be encouraged and facilitated, the following guidelines should be used:

1. Competition for space: competition for space, or the potential for it, should be indicated before any given site is promoted for water-dependent uses. The intent is to match water-dependent uses with suitable locations and thereby reduce any conflicts between competing uses that might arise. Not just any site suitable for development should be chosen as a water-dependent use area. The choice of a site should be made with some meaningful impact on the real estate market anticipated. The anticipated impact could either be one of increased protection to existing water-dependent activities or else the encouragement of water-dependent development.
2. Existing facilities and services: most water-dependent uses, if they are to function effectively, will require basic public facilities and services. In selecting appropriate areas for water-dependent uses, consideration should be given to the availability of public water, public water, adequate power, and transportation networks.
3. Access to navigational channels: where boating activity occurs, consideration should be given to sites that have access to navigation channels.
4. Compatibility with adjacent uses and the protection of other coastal resources: water-dependent uses should be located so that they enhance, or at least do not detract from, the surrounding community. Consideration should be given to such factors as the protection of nearby residential areas from odors, noise, and traffic. Affirmative approaches should also be employed so that water-dependent uses and adjacent uses can complement one another. For example, a recreation-oriented water-dependent use area could be sited in an area already oriented towards tourism. Clearly, a marina, fishing pier or swimming area would enhance, and in turn be enhanced by, nearby restaurants, motels and other non-water oriented tourist activities. Water-dependent uses must also be sited so as to avoid adverse impacts on significant coastal resources.
5. Preference to underutilized sites: The promotion of water-dependent uses should serve to foster development as a result of the capital programming, permit expediting and other State and local actions that will be used to promote the site. Nowhere is such a stimulus needed more than in those portions of the State's waterfront areas which are currently underutilized.
6. Providing for expansion: a primary objective of the policy is to create a process by which water-dependent uses can be accommodated well into the future. State agencies and localities should therefore give consideration to long-term space needs and, where practicable, accommodate future demand by identifying more land than is needed in the near future.

In promoting water-dependent uses, the following kinds of actions will be considered:

1. Favored treatment to water-dependent use areas with respect to capital programming. Particular priority should be given to the construction and maintenance of port facilities, roads, railroad facilities, and public transportation within areas suitable for water-dependent uses.

2. When areas suitable for water-dependent uses are publicly owned, favored leasing arrangements should be given to water-dependent uses.
3. Where possible, consideration should be given to providing water-dependent uses with property tax abatements, loan guarantees, or loans at below market rates.
4. State and local planning and economic development agencies should actively promote water-dependent uses. In addition, a list of sites available for non-water-dependent uses should be maintained in order to assist developers seeking alternative sites for their proposed projects.
5. Local, State and Federal agencies should work together to streamline permitting procedures that may be burdensome to water-dependent uses. This effort should begin for specific uses in a particular area.
6. Local land use controls, especially the use of zoning districts exclusively for waterfront uses, can be an effective tool of local government in assuring adequate space for the development of water-dependent uses.

Policy 3: Further develop the State's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of State public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

Explanation of Policy

There are no locations in the K-Y-C-L waterfront revitalization area that are designated as one of the State's major ports. Therefore, this LWRP Policy is not applicable.

Policy 4: Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities that have provided such areas with their unique maritime identity.

Explanation of Policy

This policy recognizes that the traditional activities occurring in and around the numerous smaller harbors that are located throughout the State's coastal area contribute much to the economic strength and attractiveness of these harbor communities. Thus, efforts of State agencies shall center on promoting such desirable activities as recreational fishing, marinas, historic preservation, cultural pursuits, scenic viewing and other compatible activities that have made small harbor areas appealing as tourist destinations and as commercial and residential areas. Consideration will be given to the visual appeal, recreational value, and social benefits of smaller harbors that, in turn, can make significant contributions to the State's tourism

industry. The Point Breeze Harbor area at the mouth of Oak Orchard in the Town of Carlton is an important small harbor of refuge that warrants support, recognition, and revitalization.

The following guidelines shall be used in determining the consistency of actions proposed within the Point Breeze Harbor and lower reach of Oak Orchard Creek:

1. The action shall give priority to those traditional and/or desired uses that are dependent on or enhanced by a location adjacent to the water.
2. The action will enhance or not detract from or adversely affect existing traditional and/or desired anticipated uses.
3. The action shall not be out of character with, nor lead to development that would be out of the character with, existing development in terms of scale, intensity of use, and architectural style.
4. The action must not cause a site to deteriorate, e.g., a structure shall not be abandoned without protecting it against vandalism and/or structural decline.
5. The action will not adversely affect the existing economic base of the community.
6. The action will not detract from views of the water and smaller harbor area, particularly where the visual quality of the area is an important component of the area's appeal and identity.

Application of these guidelines shall contribute to the overall management of the Point Breeze Harbor area pursuant to and in consideration of Article 42 of the Executive Law and local laws that would support implementation of this policy.

Policy 5: Encourage the location of development in areas where public services and facilities essential to such development are adequate.

Explanation of Policy

With its powers of construction, taxing, funding and regulation, government is a dominant force in shaping the course of development. Through these government actions, development, particularly large-scale development, in the coastal area will be encouraged to locate within, contiguous to, or in close proximity to, existing areas of concentrated development where infrastructure and public services are adequate, where topography, geology, and other environmental conditions are suitable for and able to accommodate development.

The above policy is intended to accomplish the following:

1. Strengthen existing residential, industrial, and commercial centers;
2. Foster an orderly pattern of growth where outward expansion is occurring;

3. Increase the productivity of existing public services and moderate the need to provide new public services in outlying areas;
4. Preserve open space in sufficient amounts and where desirable; and
5. Foster energy conservation by encouraging mixed use and denser development, as well as proximity between home, work, and leisure activities, where appropriate.

The following factors shall be considered in assessing the adequacy of infrastructure and public services to support future development in the coastal area:

1. Streets and highways serving the proposed site can safely accommodate the peak traffic generated by the proposed land development;
2. The water needs of the development (consumptive and firefighting) can be met by the existing water supply system;
3. The sanitary sewage disposal system can accommodate the wastes generated by the development;
4. Energy needs of the proposed land development can be accommodated by existing utility systems;
5. Storm water runoff from the proposed site can be accommodated by on-site and/or off-site facilities; and
6. Schools, police and fire protection, and health and social services are adequate to meet the needs of the population expected to live, work, shop, or conduct business in the area as a result of the development.

It is recognized that certain forms of development may and/or should occur at locations that are not within or near areas of concentrated development. Thus, this coastal development policy does not apply to the following types of development projects and activities.

1. Development that, by its nature, is enhanced by a non-urbanized setting, e.g., a resort complex, campgrounds, large-scale second home developments.
2. Water-dependent uses with site requirements not compatible with this policy or when alternative sites are not available.
3. Development that because of its isolated location and small scale has little or no potential to generate and/or encourage further land development.
4. Uses and/or activities that because of public safety consideration should be located away from populous areas.
5. Rehabilitation or restoration of existing structures and facilities.
6. Development projects that are essential to the construction and/or operation of the above uses and activities.

In certain areas where development is encouraged by this policy, the condition of existing public water and wastewater management infrastructure may necessitate improvements. Those State and federal agencies charged with allocating funds for investments in water and sewer facilities should give high priority to the needs of such areas to address potential environmental or public safety issues and promote waterfront revitalization and economic development in accordance with the provisions of this LWRP. Within the K-Y-C-L Waterfront Revitalization Area, public water service is available along the shoreline in the Towns of Yates and Carlton and the Village of Lyndonville; there is no public water service available in the Kendall coastal area. Public sanitary sewer service to support more concentrated development is available in the Village of Lyndonville. The Troutberg Cottages community in Kendall operates a private wastewater management system. To enable other areas of concentrated development or redevelopment in designated areas, such as Shadigee in the Town of Yates, and the Bridges and Point Breeze areas in the Town of Carlton, appropriate provisions must be made to support such activity. There are locations with concentrated residential development along the Town of Kendall shorefront where the establishment of a sewer district for wastewater management is desired to remedy issues associated with aging on-site systems.

Policy 6 Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

Explanation of Policy

For specific types of development activities, and in areas suitable for such development, State agencies and local governments participating in the Waterfront Revitalization Program will make every effort to coordinate and synchronize existing permit procedures and regulatory programs, as long as the integrity of the regulatory objectives is not jeopardized. These procedures and programs will be coordinated within each agency. Also, efforts will be made to ensure that each agency's procedures are coordinated with the procedures of other agencies at each level of government. Finally, regulatory programs and procedures will be coordinated and synchronized between levels of government. To achieve this goal, if necessary, legislative, and/or programmatic changes will be recommended. When proposing new regulations, a State or local agency will determine the feasibility of incorporating the regulations within existing procedures, if this reduces the burden on a particular type of development and does not jeopardize the integrity of the regulations' objectives.

Fish and Wildlife Policies

Policy 7 Significant coastal fish and wildlife habitats will be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

Policy 7A Insure the continued supply of surface water through diversion of water from the Erie Canal to augment the flow of Oak Orchard Creek.

Explanation of Policy

State-designated Significant Coastal Fish and Wildlife Habitat areas in the K-Y-C-L Waterfront Revitalization Area include Oak Orchard Creek, Johnson Creek and Sandy Creek. Activities proposed on or near these waterbodies in the coastal area should be properly evaluated to identify and avoid actions that would impair the ecological quality of these areas.

Habitat protection is recognized as fundamental to assuring the survival of fish and wildlife populations. Certain habitats are particularly critical to the maintenance of a given population and, therefore, merit special protection. Such habitats exhibit one or more of the following characteristics:

1. Are essential to the survival of a large portion of a particular fish or wildlife population (e.g. feeding grounds, nursery areas);
2. Support populations of rare and endangered species;
3. Are found at a very low frequency within a coastal region;
4. Support fish and wildlife populations having significant commercial and/or recreational value; and
5. Would be difficult or impossible to replace.

In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions destroy or significantly impair the viability of an area as a habitat. “Significant impairment” would occur when the action significantly reduces a vital resource (e.g., food, shelter, living space) or changes environmental conditions, such as temperature or turbidity, beyond the tolerance range of an organism. Indicators of a significantly impaired habitat may include reduced carrying capacity, changes in community structure (food chain relationships or species diversity), reduced productivity and/or increased incidence of disease and mortality.

The range of generic activities most likely to affect significant coastal fish and wildlife habitats include, but are not limited to the following:

1. Draining wetlands, ponds that would cause changes in vegetation, or changes in groundwater and surface water hydrology.
2. Filling wetlands, shallow areas of streams or water bodies that may change the physical character of substrate (e.g., from sandy to muddy, smother vegetation or alter surface water hydrology).
3. Grading land that results in vegetation removal, increased surface runoff or increased soil erosion and downstream sedimentation.
4. Clear cutting that may cause loss of vegetative cover; increase fluctuations in the amount of surface runoff; or increase streambed scouring, soil erosion or sediment deposition.
5. Dredging or excavation that may cause a change in substrate composition, possible release of contaminants otherwise stored in sediments, removal of aquatic vegetation or change of circulation patterns and sediment transport mechanisms.
6. Dredge spoil disposal that may include shoaling of littoral areas or change circulation patterns.
7. Physical alteration of shore areas through channelization, removal of buffer vegetation or construction of shore structure that may change the volume and rate of flow or increase scouring and/or sedimentation.
8. Introduction, storage or disposal of pollutants, such as chemicals or other toxic materials, pesticides, sewage effluent, stormwater runoff, and/or leachate of hazardous and toxic substances stored in landfills, that may cause increased mortality or sublethal effects on organisms, alter their reproductive capabilities or reduce their value as food organisms.

The range of physical, biological, and chemical parameters that should be considered include, but are not limited to, the following:

1. Physical parameters, such as living space, circulation, flushing rates, turbidity, water temperature, depth, morphology, substrate type, vegetation, soil structure, erosion, and sedimentation rates;
2. Biological parameters, such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, behavioral patterns, and migratory patterns; and
3. Chemical parameters, such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxic and hazardous materials).

To aid Federal and State agencies in determining the consistency of a proposed action with this policy, the narrative is prepared for each significant habitat offers relevant information, including:

1. The location of the habitat;
2. A description of the community of organisms that utilize the habitat;

3. Identification of the biological, physical, and chemical parameters which should be considered when assessing the potential impacts of a project on that habitat;
4. Identification of generic activities which would most likely create significant impacts on the habitat; and
5. The quantitative basis used to rate the habitat.

When a proposed action is determined likely to alter any of the biological, physical or chemical parameters, as described in the narrative, beyond the tolerance range of the organisms occupying the habitat, the viability of that habitat has been significantly impaired or destroyed. Such action, therefore, would be deemed inconsistent with this policy and prohibited without modification to eliminate habitat impairment(s).

Where destruction or impairment of habitat value cannot be avoided, potential impacts of land use or development shall be minimized through appropriate mitigation. Use mitigation measures that are likely to result in the least environmentally damaging alternative. Mitigation techniques include:

1. Avoidance of potential adverse impacts to ecologically sensitive areas, scheduling activities to avoid vulnerable periods in life cycles or the creation of unfavorable environmental conditions and preventing fragmentation of intact habitat areas.
2. Minimization of unavoidable potential adverse impacts, including:

    a. reducing the scale or intensity of the use or development;
    b. designing projects to result in the least amount of potential adverse impacts;
    c. choosing alternative actions or methods that would lessen potential impacts;
    d. using specific measures to protect habitat values from impacts that cannot be sufficiently avoided or minimized to prevent habitat destruction or significant habitat impairment;
    e. and/or implementing the specific protective measure included in the narratives for each State-designated Significant Coastal Fish and Wildlife Habitat.

A habitat impairment test must be met for any activity that is subject to consistency review to identify potential actions that may destroy the habitat or significantly impair the viability of the State Designated Significant Fish and Wildlife Habitats in the K-Y-C-L Waterfront Revitalization Area. If a proposed action is subject to consistency review, then this habitat protection policy applies, whether the action is to occur within or outside of the designated habitat area.

To assist in applying the habitat impairment test, the following are examples of generic activities that could potentially impact the Oak Orchard Creek habitat;

1. Any activity that substantially degrades water quality, increases temperature or turbidity, reduces flows or alters water depths would adversely affect many fish and wildlife species and fisheries resources in Oak Orchard Creek. As these impacts would be particularly detrimental during fish spawning and nursery periods, they must be avoided from late February through July for most warm water species and steelhead, and September through November for most salmonids.
2. Discharges of sanitary waste or stormwater runoff containing sediments or chemical pollutants (including fertilizers, herbicides, or insecticides), could adversely impact on the fish and wildlife resources of the area. Of particular concern are the potential effects of upstream disturbances, including water withdrawals, stream bed disturbances and alterations and effluent discharges.
3. Hydro-electric facilities on Oak Orchard Creek should only be permitted with run-of-river operations.
4. Permanent disturbance or elimination of wetland vegetation, including submergent beds, through dredging, filling, or bulkheading, would result in a direct loss of valuable habitat area.
5. Barriers to fish migration, whether physical or chemical, could have a significant impact on fish populations in this area.
6. Excavation and dredging, including maintenance dredging at the mouth of Oak Orchard Creek must not be conducted in a manner that will not harm or otherwise threaten habitat resources.
7. Existing areas or natural vegetation bordering Oak Orchard Creek should be maintained to provide bank cover, perching sites, soil stabilization and buffer zones.

To assist in applying the habitat impairment test, the following are examples of generic activities that could potentially impact the Johnson Creek habitat;

1. Any activity that substantially degrades water quality, increases temperature or turbidity, reduces flows or alters water depths would adversely affect many fish and wildlife species and fisheries resources in Johnson Creek. These impacts would be particularly detrimental during fish spawning and nursery periods and must be avoided from late February through July for most warm water species and steelhead, and September through November for most salmonids.
2. Discharges of sanitary waste or stormwater runoff containing sediments or chemical pollutants (including fertilizers, herbicides, or insecticides), could adversely impact on the fish and wildlife resources of the creek. Of particular concern are the potential effects of upstream disturbances, including water withdrawals, stream channel alterations and effluent discharges. Any discharges of toxic chemicals into Johnson Creek must be prevented in the future to avoid long-term adverse impacts on fisheries resources.
3. Clearing of natural vegetation along Johnson Creek, and other activities that would increase bank erosion or eliminate productive channel areas, would reduce habitat quality in Johnson Creek.

4. Elimination of wetland vegetation, including submergent beds, through dredging, filling, or bulkheading, could result in a direct loss of valuable habitat area.
5. Excavation and dredging, including maintenance dredging at the mouth of Johnson Creek must not be conducted in a manner that will not harm or otherwise threaten habitat resources.
6. Barriers to fish migration, whether physical or chemical, could have a significant impact on fish populations and their recreational use.
7. Existing woodlands bordering Four Mile Creek Bay should be maintained for their value as cover, perching sites and buffer zones.

To assist in applying the habitat impairment test, the following are examples of generic activities that could potentially impact the Sandy Creek habitat;

1. Any activity that substantially degrades water quality, increases temperature or turbidity, reduces flows, or alters water depths would adversely affect many fish and wildlife species and fisheries resources in Sandy Creek. These impacts would be particularly detrimental during fish spawning and nursery periods and must be avoided from late February through July for most warm water species and steelhead, and September through November for most salmonids. Activities as far inland as Albion or Holley should be evaluated for potential impacts to fisheries resources.
2. Discharges of sanitary waste or stormwater runoff containing sediments or chemical pollutants (including fertilizers, herbicides, or insecticides), could adversely impact on the fish and wildlife resources of the area. Efforts must be made to reduce stream disturbance by agricultural activities, especially grazing, through fencing and restoration of natural riparian vegetation.
3. Stream channel alterations shall be avoided, including dredging, filling, or channelization, which could reduce the habitat quality in Sandy Creek.
4. Elimination of wetland vegetation, including submergent beds, through dredging, filling, or bulkheading, must be avoided as they would result in a direct loss of valuable habitat area.
5. Barriers to fish migration shall be avoided, whether physical or chemical, as they would have significant impacts on bass and salmonid populations in the creek.

Oak Orchard Creek in the Town of Carlton possesses unique and irreplaceable qualities that are protected under the Town's Oak Orchard Creek Preservation District. This district includes the entire water surface area of the creek, from Route 18 south to the Waterport dam, including significant fish and wildlife habitat areas, all the creek banks and a 25-foot top of the bank setback. Activities proposed within the Oak Orchard Creek Preservation District must comply with the following provisions:

1. Any and all development activity within 250 feet of the district shall require site plan approval by the Town of Carlton Planning Board.

2. No building permit and/or special permit shall be issued for development that would or could impair or depreciate the natural, unique, and irreplaceable beauty and historic significance of Oak Orchard Creek.
3. New structures and roads, with the exception of fences, docks, boathouses, bridges and stairs, shall not be constructed within the 25-foot top of bank setback. This natural buffer strip shall serve to provide protection from flooding and erosion, as well as, preserving stream corridor aesthetics.
4. No new dock or boathouse shall be located within 500 feet of another dock or boathouse, except when such new dock or boathouse is located on a separate and distinct, legally constituted lot or parcel, on the same side of Oak Orchard Creek. Said distance shall be measured in a straight line between the nearest points of the structures.
5. All construction of new structures shall be consistent with the general standards set forth in the Town's Flood Prevention Local Law.
6. No new dock, boathouse, bridge or fence shall be constructed that will impede the natural flow of the creek, and will be so located, designed and constructed as to minimize intrusion into the water and avoid adverse environmental impacts.
7. The harvesting, cutting, removal or thinning of vegetation that would increase erosion of the creek bank, from the mean high water point up the creek bank and including the 25-foot top of bank setback, is prohibited.
8. The above cutting standard shall not be deemed to prevent the regular mowing of weeds or grass, the removal of diseased vegetation or of rotten and damaged trees or of vegetation that presents a safety, environmental or health hazard.
9. The planting and promotion of vegetation to inhibit erosion is encouraged.
10. When the creek is excavated in any manner, vegetation to stabilize the creek bank and prevent erosion must be planted per NYSDEC specifications.

Invasive species of aquatic plants and animals are a threat to the ecological integrity of Lake Ontario and lake tributaries and watersheds. Invasive species cause or contribute to:

1. Habitat degradation and loss,
2. Disruption of natural ecological processes,
3. The loss of native fish, wildlife, and tree species, and
4. The loss of recreational opportunities and income.

Monitoring aquatic ecosystems is critical to preventing, detecting, and reducing the spread and impact of aquatic invasive species that threaten waters in the Lake Ontario watershed. Educating landowners as to the proper control and eradication of invasive plant species is a critical part of maintaining watershed

health. Identifying and removing invasive species is a vital aspect of restoring ecological health. Early detection and response are critical for the effective control of invasive species. Another important, and often overlooked component, is the proper disposal of invasive plants. Invasive plants and animals must be disposed of properly, as they will only contribute to the spread of new infestations.

Policy 8 Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources.

Explanation of Policy

Hazardous wastes are unwanted by-products of manufacturing processes and are generally characterized as being flammable, corrosive, reactive, or toxic. More specifically, hazardous waste is defined in NYS Environmental Conservation Law [S27-0901(3)] as "waste or combination of wastes which because of its quantity, concentration, or physical, chemical or infectious characteristics may:

1. Cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; or
2. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or otherwise managed."

A list of hazardous wastes (NYCRR Part 366) will be adopted by DEC within six months after formal adoption by the U.S.EPA.

The handling (storage, transport, treatment, and disposal) of hazardous materials is strictly regulated in New York State to prevent their entry or introduction into the environment, particularly into the State's air, land, and waters. Such controls should effectively minimize possible contamination of and bio-accumulation in the State's coastal fish and wildlife resources at levels that cause mortality or create physiological and behavioral disorders. Other pollutants are those conventional wastes generated from point and non-point sources and not identified as hazardous wastes but controlled through other State laws.

Policy 9 Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources.

Explanation of Policy

Recreational uses of coastal fish and wildlife resources in the K-Y-C-L Waterfront Revitalization Area include consumptive uses, such as fishing and hunting, and non-consumptive uses such as wildlife photography, bird watching, and nature study and interpretation. Any efforts to increase recreational use of these resources will be made in a manner that ensures the protection of fish and wildlife resources in local surface waters and surrounding upland areas, and that takes into consideration other activities dependent on these resources. Additionally, such efforts must be conducted in accordance with existing State law and in keeping with sound management considerations. Such considerations include biology of the species, carrying capacity of the resources, public demand, costs, and available technology.

The recreational use of fish and wildlife resources is important in the K-Y-C-L Waterfront Revitalization Area and provides great benefit to the public. This is particularly significant on Lake Ontario and in the major tributary creeks, where recreational sports fishing is an important industry and vital component of the Orleans County economy. Oak Orchard Creek, Lake Alice, Johnson Creek, and other local creeks are widely used throughout the year. The NYSDEC undertakes extensive stocking of fishery resources in Lake Ontario; this activity should be continued and expanded in the coastal area to continue and strengthen local fishing activity.

Johnson Creek and Oak Orchard Creek both support significant salmon populations and are both restricted by dams. The dam at Patterson Pond impacts the ability of salmon species to reach upper reaches of the creek during their spawning season. Similarly, salmon that congregate below the Waterport dam cannot reach the waters of Lake Alice. Both locations provide opportunities for the installation and use of salmon ladders to aid in the ability of these fish to reach upstream waters. Although the falls at Waterport dam may be a more difficult location for use of a fish ladder, the idea should be evaluated with the NYSDEC. Patterson Pond, on the other hand, could more easily accommodate a fish ladder. Plans to renovate or realign the dam at Patterson Pond should include plans for inclusion of a fish ladder.

In additional to protecting the fish resources in the coastal area, the upland areas that provide access for fishing must be protected from overuse Certain privately owned areas along the waterfront, such as the area surrounding the hydro-electric facility on Oak Orchard Creek in Carlton or the dam at Patterson Pond in Lyndonville, experience large influxes of fishermen during certain times of the year. Where fishermen are using private lands to access fisheries resources, it is necessary that cooperative agreements be secured between landowners and government entities to ensure that the level of use does not adversely

impact existing resources or the surrounding environment. Where the use of private lands becomes excessive, resulting in public safety hazards or environmental degradation, appropriate action must be undertaken on the part of the private landowner and government entities to control or limit use.

Where practicable, new access opportunities for shoreline fishing should be explored, and existing locations enhanced, to expand and improve the recreational use of fish and wildlife. Such actions should be undertaken in a manner that expands the use of existing resources without adversely impacting the environment or compromising the quality and integrity of significant habitat resources.
The following guidelines shall be followed by local, State, and federal agencies as they determine the consistency of a proposed action with this policy:

1. Consideration should be made by federal and State agencies as to whether an action will impede existing or future utilization of recreational fish and wildlife resources.
2. Efforts to increase access to recreational fish and wildlife resources should not lead to overutilization of that resource or cause impairment of the habitat. Sometimes such impairment can be more subtle than actual physical damage to the habitat. For example, increased human presence can deter animals from using the habitat area.
3. The impacts of increasing access to recreational fish and wildlife resources should be determined on a case-by-case basis, balancing the importance of a significant habitat (see Policy 7) and/or conferring with a trained fish and wildlife biologist.
4. Any public or private sector initiatives to supplement existing stocks (e.g., stocking a stream with fish reared in a hatchery) or develop new resources must be done in accordance with existing State regulations.

Policy 10 Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing onshore commercial fishing facilities, increasing marketing of the State's seafood products, maintaining adequate stocks, and expanding aquaculture facilities.

Explanation of Policy

There are not commercial fishing facilities or uses undertaken within K-Y-C-L Waterfront Revitalization Therefore, this LWRP Policy is not applicable.

Flooding and Erosion Hazards Policies

Policy 11 Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Explanation of Policy

On coastal lands identified as coastal erosion hazard areas, buildings and similar structures shall be set back from the shoreline a distance sufficient to minimize damage from erosion unless no reasonable prudent alternative site is available, as in the case of piers, docks and other structures necessary to gain access to coastal waters to be able to function. The extent of the setback will be calculated by taking into account the rate at which land is receding due to erosion and the protection provided by existing erosion protection structures, as well as by natural protective features such as beaches, sandbars, nearshore areas, bluffs and wetlands. The only new structure allowed in coastal erosion hazard areas is a moveable structure as defined in 6 NYCRR Part 505.2(x). Prior to its construction, an erosion hazard areas permit must be approved by the NYSDEC for the structure. Existing non-conforming structures located in coastal erosion hazard areas may be only minimally enlarged, as authorized by the State. Where human lives may be endangered by major coastal storms, all necessary emergency preparedness measures should be taken, including disaster preparedness planning.

This policy seeks to protect life, structures, and natural resources from the hazards of flooding and erosion. The policy reflects the flood damage regulations adopted and enforced by the Towns of Yates, Carlton and Kendall and the Village of Lyndonville and provides measures for the reduction of hazards and protection of resources. The provisions of this policy are applicable to the floodplain areas adjacent to Lake Ontario and the major creeks and tributaries to the lake, as well as other floodplain areas within the coastal area, as designated by the Federal Emergency Management Agency (FEMA).

Floodplains in the K-Y-C-L coastal area, as designated by the FEMA, are depicted on Flood Insurance Rate Maps that were prepared for the three Towns in 1978 and for Lyndonville in 1981 (updates are expected for the Orleans County communities by 2021). The Towns and Village participate in the National Flood Insurance Program and development in the floodplain is regulated under Local Law #1 of 1987 in the Town of Yates, Local Law #1 of 1987 in the Town of Carlton, Chapter 93 – Flood Damage Prevention in the Town of Kendall, and Local Law #2 of 1987 in the Village of Lyndonville.

These laws are designed to promote the public health, safety, and general welfare and to minimize public and private loss due to flood conditions in specific areas, as designated on the Flood Insurance Rate Maps. Pursuant to the local Flood Prevention Laws, all construction and other development that is proposed within regulated areas of special flood hazards (100-year floodplains) requires a permit from the

Local Floodplain Administrator and must be in compliance with the standards outlined in the respective Flood Damage Prevention Laws for each community (which are included in the Appendix). All construction undertaken in regulated flood prone areas in the coastal area are subject to the provisions of these local laws, as well as any other State and federal regulations that might apply.

The natural shoreline has an inherent natural, social, and economic value that should be respected to ensure continuing benefits to the public. Lake Ontario is a constant force that impacts the shoreline in the Towns of Yates, Carlton, and Kendall, particularly during severe storm events and high-water levels that follow periods of significant rainfall and snowmelt. Portions of the Lake Ontario shoreline in all three Towns are located in designated Coastal Erosion Hazard Areas. The Town of Kendall adopted a local CEHA Law in (Chapter 59 of the Town Code). The Towns of Yates and Carlton defer to ECL Article 34 and the NYSDEC for CEHA regulation and enforcement.

To address the impacts of coastal storms, hardening of the shoreline should be avoided except when alternative means, such as soft engineering alternatives and revegetation, are impractical to protect principal structures or extensive public investment (land, infrastructure, and facilities) from flooding and erosion. Where possible, those portions of the Lake Ontario shoreline that are not fortified should generally remain in a natural condition to respond to natural processes. Where fortification is to be used, a combination of hard and soft measures shall be employed to the greatest extent practical. Where possible and appropriate, areas of the shoreline that have been hardened should be returned to a natural condition. Of greatest importance is that all required shoreline protection structures that are in disrepair must be repaired and that shoreline protection structures be maintained to ensure their utmost effectiveness. This must be promoted and enforced in all three shoreline communities.

Policy 12 Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.

Explanation of Policy

The shoreline along Lake Ontario contains natural protective features that are located within designated Coastal Erosion Hazard Areas. These include bluffs, beaches and nearshore areas, which help to safeguard waterfront lands and property from storm damage, as well as reduce the danger to human life, resulting from flooding and erosion caused by severe storms and high-water levels on Lake Ontario and in the major tributary creeks. Excavation of natural protective coastal features, improperly designed or maintained erosion protection structures, inadequate site planning, or other similar actions that fail to recognize the fragile nature and high protective values of natural protective resources, lead to the weakening or destruction of those landforms. Activities or development in, or in proximity to, natural

protective features must ensure that all such adverse actions are minimized or eliminated. Existing erosion protection structures shall be well maintained to ensure their ability to protect shoreline natural resources and property from storm and high-water damage.

The following guidelines and provisions shall be used in determining the consistency of proposed actions with this policy. In general, any activity or development in, or in proximity to, a natural protective feature that may be permitted under the other State or local regulations must be consistent with this policy to prevent or minimize, to the greatest extent possible, potential adverse effects on these resources.

1. Nearshore Areas, including those lands under water, beginning at the mean low water line and extending seaward in a direction perpendicular to the shoreline to a point where the mean low water depth is 15 feet, or to a horizontal distance of 1,000 feet from the mean low water line, whichever is greater.
    a. Excavating, mining, or dredging that diminishes erosion protection afforded by natural protective features in the near shore area is prohibited, except dredging for construction or maintenance of navigation channels, bypassing of sand around natural or man-made obstructions or artificial beach nourishment.
    b. Clean sand or gravel of a compatible type and size is the only material that may be deposited within near shore areas.
    c. All development is prohibited in nearshore areas unless specifically permitted under these provisions.
    d. A coastal erosion management permit is required for new construction, modification or restoration of docks, piers, wharves, seawalls, bulkheads, breakwaters, revetments, and artificial beach nourishment activities must be evaluated by appropriate State and federal agencies. Docks, piers, wharves or similar structures built on floats, columns, open timber, piles or similar open-work supports having a top surface area of 200 square feet or less, or docks, piers, wharves or similar structures built on floats and removed in the fall of each year are exempted from this provision.
    e. The normal maintenance of structures may be undertaken without a coastal erosion management permit.

2. Beach areas include the zone of unconsolidated material that extends landward from the mean low water line to the place where there is a marked change in the material or physiographic form, or to the line of permanent vegetation, whichever is most seaward, except where dune formations are present, the beach area extends to the upland toe of the dune.

a. Excavation or mining that diminishes the erosion protection afforded by beaches is prohibited.
b. All development is prohibited on beaches unless specifically permitted under these provisions.
c. The restoration of existing structures that are damaged or destroyed by events no related to coastal flooding and erosion may be undertaken without a coastal erosion management permit.
d. A coastal erosion management permit is required for new construction, modification or restoration of docks, piers, wharves, boardwalks, seawalls, bulkheads, breakwaters, revetments, and artificial beach nourishment activities must be evaluated by appropriate State and federal agencies. Docks, piers, wharves or similar structures built on floats, columns, open timber, piles or similar open-work supports having a top surface area of 200 square feet or less, or docks, piers, wharves or similar structures built on floats and removed in the fall of each year are exempted from this provision.
e. A coastal erosion management permit is required for the deposition of materials on beaches only for the purpose of expanding or stabilizing these areas. Clean sand or gravel of a compatible type and size is the only material that may be deposited within beach areas.
f. Active bird nesting and breeding areas on beaches or other natural protective features must not be disturbed unless such disturbance is pursuant to a specific wildlife management activity approved in writing by NYSDEC.
g. The normal maintenance of structures may be undertaken without a coastal erosion management permit.
h. Beach grooming and clean-up may be undertaken without a coastal erosion management permit.

3. Bluffs include any bank or cliff with a precipitous drop or rounded face adjoining a beach or body of water. The seaward limit of a bluff is the upland limit of its contiguous beach. Where no beach is present, the seaward limit is the mean low water line. The upland limit is 25 feet upland of the receding edge of the bluff.

a. Excavation or mining of bluffs is prohibited, except to provide shoreline access in appropriate areas in accordance with the provisions of this policy and other applicable regulations.
b. Any grading, excavating or other soil disturbance conducted on a bluff must not cause or direct surface water over the receding edge of the bluff or bluff face.
c. The normal maintenance of structures may be undertaken without a coastal erosion management permit.

4. All development on bluffs is prohibited unless otherwise permitted pursuant to the following provisions:

   a. Minor alterations of a bluff for new construction, modification, or restoration of an erosion protection structure.
   b. Bluff cuts for the provision of shoreline access, where the cut is made in a direction perpendicular to the shoreline, the ramps slope of the cut does not exceed a one on six gradient, the side slopes do not exceed a one on three gradient (unless terraced or otherwise structurally stabilized), side slopes and other disturbed non-roadway areas are stabilized with vegetation or other approved physical means, and completed roadways are stabilized and drainage is properly provided.
   c. New construction, modification or restoration of walkways or stairways for pedestrian use.
   d. Active bird nesting and breeding areas on bluffs or other natural protective features must not be disturbed unless such disturbance is pursuant to a specific wildlife management activity approved in writing by NYSDEC.

5. The use of motor vehicles is strictly prohibited on beaches, beach vegetation and bluffs. Vehicles may only access beach areas for boat launching purposes, where permitted, and must be removed immediately thereafter.
6. Activities and development within natural erosion protection areas that have been designated by NYSDEC as Coastal Erosion Hazard Areas must comply, as required, with the provisions of Article 34 of the Environmental Conservation Law and its implementing regulations (6 NYCRR 505) or locally adopted laws for Coastal Erosion Hazard Areas.
7. Navigation infrastructure must be managed to limit adverse impacts on coastal processes. Design channel construction and maintenance projects to protect natural protective features and other resources and prevent destabilization of adjacent areas by:

   a. Using dredging setbacks from established channel edges and designing finished slopes to ensure their stability.
   b. Locating channels away from erodible features, where feasible.
   c. Preventing adverse alteration of basin hydrology.
   d. Managing marina operations and vessel speeds to prevent shoreline erosion from increased wave activity.

Policy 13 The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

Explanation of Policy

Various forms of erosion protection are widely used throughout the K-Y-C-L Waterfront Revitalization area. The construction of erosion protection structures is expensive, often only partially effective over time, and can be harmful to adjacent or nearby properties Due to improper design, construction, and/or maintenance, as well as age, some fail to offer the protection they were originally intended to provide. As a result, certain development may be sited in areas where it is subject to damage or loss due to flooding and erosion.

This policy is designed to help ensure that erosion protection structures in the coastal area are properly constructed or reconstructed to provide effective, long-term protection to reduce such damage or loss. This is particularly important where public funds are used for the construction or reconstruction of these structures. Property owners shall undertake proper maintenance, as needed, to ensure that erosion protection structures are in adequate condition and capable of providing effective protection. Where necessary, vegetative plantings and other protective measures should be utilized or strengthened to ensure the effectiveness of existing erosion protection measures along the shoreline.

In those instances where properly designed and construction erosion protection structures are likely to minimize or prevent damage and destruction to public and private property, natural protective features and other natural resources, construction may be allowed, as determined by State regulatory agencies. In selecting such structures, the use of stone riprap is preferred over bulkheading. The construction, modification or restoration of erosion protection structures is subject to the following requirements. When these structures are to be located within a Coastal Erosion Hazard Area, local and/or State regulations will apply.

1. All erosion protection structures must be designed and constructed according to generally accepted engineering principles that have demonstrated success or, where sufficient data is not currently available, a likelihood of success in controlling long-term erosion. The protective measures must have a reasonable probability of controlling erosion on the immediate site for a minimum of 30 years.
2. A long-term maintenance program must be provided that includes specifications for normal maintenance of degradable materials and periodic replacement of removable materials.
3. All materials used in such structures must be durable and capable of withstanding inundation, wave impacts, weathering, and other effects of storm conditions. Individual component materials may have a working life of less than 30 years only when a maintenance program ensures that they

will be regularly maintained and replaced as necessary to attain the required minimum 30 years of erosion protection.

4. No structure can be constructed, erected, placed, or altered without providing:

   a. Plans, details, and specifications justifying and establishing the need for the structure.
   b. Evidence that the structure and its installations will not harm or destroy key fish and wildlife habitats or other natural features, or that the effects of the installation can be mitigated or lessened.
   c. Evidence that the structure has a service life (with routine maintenance) of a minimum of 30 years and that the structure will not fail and become a danger to navigation or public safety.
   d. Evidence that facilities adjacent to or supported by an erosion protection structure will be properly supported by that struct8ure and that the structure will stabilize waterfront lands and facilities.
   e. Evidence that the structure was planned and installed in a manner that is essentially self - contained and will not lead to differential erosion on nearly or adjacent shorelines.
   f. Evidence that property regulation permits have been obtained from the U.S. Army Corps. of Engineers and the NYSDEC prior to construction.

Policy 14 Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Explanation of Policy

Erosion and flooding are processes that occur naturally. However, by our actions, humans can increase the severity and adverse effects of those processes, causing damage to, or loss, of property and endangering human lives. Those actions include:

1. The use of erosion protection structures, such as seawalls, groins, or impermeable docks, that interfere with the littoral transport of sediment to adjacent shorelands, thus increasing the rate of erosion on adjacent properties;
2. The failure to observe proper drainage or land restoration practices upland of the shoreline, thereby causing runoff and the erosion and weakening of the natural protective features along the shoreline; and

3. The placement of structures in identified floodways so that the base flood level is increased, causing damage to otherwise hazard-free areas.

No activity or development should be undertaken in the K-Y-C-L coastal area that would result in flooding or erosion, or any measurable increase of such. Property owners should take care to ensure that stormwater runoff generated upland of the top of bluffs or the shoreline in general does not weaken the stability of these resources. The planting of vegetation upland of the top of a bluff can help to absorb stormwater flows, helping to mitigate potential impacts. In no case should drainage be directed toward the shoreline that would threaten the stability or protective capability of shoreline resources. Additionally, where possible, plantings should be added behind stone revetment and riprap and similar structures that are placed at the toe of a bluff to further stabilize those areas.

Policy 15 Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.

Explanation of Policy

Coastal processes, including the movement of shoreline sediment by water, and any dredging in nearshore or offshore waters that changes the supply and net flow of such materials, can deprive shorelands of their natural regenerative powers. Dredging activities in Lake Ontario and Oak Orchard Creek, or any other areas in the coastal area, should be accomplished in a manner that does not cause a reduction of supply, and thus an increase of erosion, to adjacent shorelands. Any dredging activity in the coastal area must be coordinated with the Lake Ontario Regional Dredging Planning Council prior to being undertaken to ensure consistency and compliance with Council requirements, as well as this policy. There are no offshore mining or excavation activities in the K-Y-C-L Waterfront Revitalization Area.

Policy 16 Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.

Explanation of Policy

Public funds are used for a variety of purposes along waterfronts in the State. This policy recognizes the public need for the protection of human life and existing investment along the shoreline in the K-Y-C-L communities, as well as the need for new development that requires a location in proximity to the shoreline or in adjacent waters, to be able to function (water-dependent uses). However, it also recognizes the potential adverse impacts of such activities and development on the rate of erosion and on the integrity of natural protective features. Therefore, a careful analysis of the long-term costs and benefits of

the use and installment of erosion protection structures shall be undertaken prior to the expenditure of public funds for such structures in the K-Y-C-L coastal area.

Policy 17 Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

Policy 17A Manage boating activity in the upper reaches of Oak Creek to address erosion of the shoreline and gorge walls in this area.

Explanation of Policy

This policy recognizes both the potential adverse impacts of flooding and erosion upon development, natural resources, and natural protective features in the coastal area, as well as the costs of providing structural protection against those hazards. This policy shall apply to the planning, siting and design of proposed activities, structures, and development, including measures to protect existing development and resources against flooding and erosion in the K-Y-C-L Waterfront Revitalization Area. To ascertain consistency with this policy, it must be determined if any one measure, or any combination of non-structural measures, would afford the degree of protection appropriate to the character and purpose of the activity or development, and to the hazard. If non-structural measures are determined to offer sufficient protection, then consistency with this policy would require the implementation of such measures whenever possible. Non-structural measures shall include, but are not limited to, the avoidance of risk or damage from flooding by the siting of buildings outside the structural hazard area, and the flood-proofing of buildings or their elevation about the base flood level.

"Non-structural measures" shall include, but not be limited to:

1. Within coastal erosion hazard areas identified under Section 0104 of Coastal Erosion Hazard Areas law (Environmental Conservation Law Article 34), and subject to the permit requirements on all regulated activities and development established under that law, (a) the use of minimum setbacks as provided for in Section 0108 of Environmental Conservation Law Article 34; and (b) the strengthening of coastal landforms by the planting of appropriate vegetation on dunes and bluffs, the installation of sand fencing on dunes, the reshaping of bluffs to achieve an appropriate vegetation on dunes and bluffs, the installation of sand fencing on dunes, the reshaping of bluffs to achieve an appropriate angle of repose so as to reduce the potential for slumping and to permit the planting of stabilization vegetation, and the installation of drainage systems on bluffs to reduce runoff and internal seepage of waters which erode or weaken the landforms; and

2. Within identified flood hazard areas, (a) the avoidance of risk or damage from flooding by the siting of buildings outside the hazard area, and (b) the flood-proofing of buildings or their elevation about the base flood level.

In determining whether non-structural measures to protect against erosion or flooding will afford the degree of protection appropriate, an analysis of the site and of the alternative protection measures and, if necessary, other materials such as plans or sketches of the activity or development, should be prepared to allow an assessment to be made. Under all circumstances the provisions of all local Code Flood Damage Prevention Laws and regulations must be followed.

Various forms of shoreline protection are in place along much of the Lake Ontario and its tributaries to protect the shoreline from erosion. This policy acknowledges that the Lake Ontario shoreline is subject to the impacts of intense wave action from severe storms, particularly during times when water levels in the lake are elevated, and that non-structural measures may not be effective in certain areas. Shoreline protection structures include the use of stone revetment and rip rap, concrete rubble, and concrete seawalls, and bulkheading, depending on the location, to ensure proper protection from flooding and erosion. It must be recognized that while shoreline hardening may provide relief from erosion in areas subjected to intense storms and wave action, these structural measures are expensive to install, can degrade shoreline habitat and interrupt natural shoreline processes, and may act to transfer erosion problems to adjacent areas. Alternative shoreline management techniques exist and should be considered for use as a first or next step for erosion protection in problem areas, whenever possible. Alternative measures should also be considered in combination with structural measures to increase protection, where feasible. Examples of alternative measures for protecting the shoreline include bioengineering techniques and planted buffers that utilize deep rooted vegetation. These alternative solutions can result in a more naturalized shoreline, which has ecological and aesthetic benefits. Hard structural erosion protection measures should only be used where there is a documented erosion problem and where alternative measures have been proven to be inadequate to protect the principal use**.**

The upper reach of Oak Orchard Creek, below the Waterport dam, is being impacted by vessel use that is causing shoreline erosion. Restricting vessel speed limits and establishing no-wake zone restrictions on Oak Orchard Creek, as well as on Lake Alice and other appropriate locations in the coastal area where shoreline erosion is resulting from vessel activity (and no such restrictions exist) will help to control erosion and the deterioration of natural conditions along the shoreline from adverse wave action. Furthermore, compliance with the provisions of the Town of Carlton Oak Orchard Creek Preservation District is required to help prevent shoreline erosion along the creek.

General Policy

Policy 18 To safeguard the vital economic, social and environmental interests of the State and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the State has established to protect valuable coastal resource areas.

Policy 18A Water levels in Lake Ontario and Oak Orchard Creek shall be maintained at a minimum sufficient to guarantee their viability, use and safety through appropriate actions of federal, state and local government agencies, international entities and public utilities in order to protect coastal resources and existing and proposed water-dependent uses.

Explanation of Policy

Proposed major actions may be undertaken in the K-Y-C-L Waterfront Revitalization Area if it is determined that they will not significantly impair valuable coastal waters and resources, and do not impair the safeguards established to protect these waters and resources. Proposed actions must take into account the social, cultural, economic and environmental interests of the communities, the State and its citizens in such matters that would affect natural resources, water levels and flows, shoreline conditions, hydro-electric power generation, recreational opportunities, and public access.

As discussed in the Inventory and Analysis, the International Joint Commission established the International St. Lawrence River Board of Control as the mechanism for regulating water levels in Lake Ontario and St. Lawrence River. Water levels are managed through the regular diversion of lake water for the St. Lawrence Seaway Power Project (Moses-Saunders Dam), which is located between Massena, New York and Cornwall, Ontario, at the eastern end of the lake. Water levels in Lake Ontario are controlled by natural factors, including precipitation, wind, and evaporation, along with surface water runoff. However, strong wind and storm events generate significant amounts of runoff into the Great Lakes and St. Lawrence Seaway system. Lake Ontario is located at the end of this system, receiving flow from the other lakes that drain to the St. Lawrence River, particularly Lake Erie. Periodic events are causing atypical water levels in Lake Ontario that have resulted in significant damage to shoreline resources and property. The International Joint Commission, in coordination with State and local governments, must balance the interests of the communities along the Lake Ontario shoreline with those of communities in the St. Lawrence region, as well as utility demands, to ensure that water levels in Lake Ontario are maintained at depths sufficient to protect the viability, use and public safety of lakeshore communities. This means ensuring that water diversions are made, above and beyond what is mandated by established criteria in the

2014 Plan, when necessary to protect shoreline property and resources in the K-Y-C-L coastal area, as well as other areas of the State located along the lakeshore.

Public Access Policies

Policy 19 Protect, maintain, and increase the level and types of access to public water related recreation resources and facilities.

Policy 19A Increase pedestrian access to public fishing resources along Lake Ontario, its tributaries and Lake Alice via public rights-of-way and private land easements.

Policy 19B Encourage the development of public access to shoreline areas in underserved areas.

Policy 19C Promote the development of additional recreational opportunities at Lakeside Beach State Park, including swimming.

Explanation of Policy

This policy calls for achieving a balance among the level of access to a resource or facility, its capacity, and the protection of natural resources. An imbalance among these factors is often due to access-related problems; therefore, priority will be given to improving physical access to existing and potential coastal recreation sites within the K-Y-C-L Waterfront Revitalization Area. In particularly, improved access is prioritized for boating facilities, fishing areas, shoreline trails and waterfront parks. Also, there are no public beaches or other facilities for swimming anywhere in the coastal area. This policy, as well as Policies 20, 21 and 22 support the list of proposed projects and other actions outlined in Section IV – Proposed Land and Water Uses and Proposed Projects, that are designed to increase the level and types of public access and water-related recreational uses in the coastal area.

Public access improvements are needed to better establish the connection between upland areas and the waterfront, including larger community-wide trail systems and smaller connections to popular fishing and recreation sites. The Towns and Village must capitalize on opportunities to increase access to existing water-related recreation facilities (State, County, Town, and Village parks) and provide and/or improve access to local waterways to enhance overall public use.

Linkages are also important and should be created through the creation of a waterfront trail system, which do not exist outside of Lakeside Beach State Park in the Town of Carlton. The establishment of a system of trails along the north/south oriented roadways in the Town of Yates (Morrison Road, Lyndonville Road, Yates-Carlton Town Line Road and Marshall Road) would enable public access between the

Village of Lyndonville and the Lake Ontario shoreline. It would also incentivize improvements to the Yates Town Park and Town Pier sites.

A linkage between Point Breeze and Orleans County Marine Park should be established to allow pedestrian and bicycle activity between these local resources. A hike/bike trail should also be established along Lake Ontario State Parkway (a designated segment of the New York Great Lakes Seaway Trail), allowing residents and visitors to the Towns of Carlton and Kendall the opportunity to enjoy the Lake Ontario shoreline. This should be evaluated at part of the ongoing study of this major roadway. Opportunities for improved access to local shoreline fishing sites along Oak Orchard, Johnson and Sandy Creeks and Lake Alice, should also be pursued.

Boat launches along Oak Orchard Creek in the Kuckville hamlet area and in Lakeside Beach State Park should be re-established to provide boating access to the creek. A boat launch at Yates Town Park and/or at the foot of North Lyndonville Road would provide access to the Lake Ontario in the western portion of the coastal area, where no such access currently exists.

The Lake Alice reservoir supports extensive water-related recreation and recreational boating. The lake is used for fishing, waterskiing, jet skiing, canoeing, and kayaking and swimming. The extent and variety of usage has created the need for management of this resource. The establishment and enforcement of regulations is necessary to regulate vessel speeds, mitigate wave action that is impacting the shoreline and manage the uses that occur on the lake. A water use and management plan should be developed to help control how the lake is used and address use conflicts that are affecting its use and enjoyment.

The Waterport dam is a popular location for shoreline fishing and is extensively used at certain times of the year. Erie Blvd. Hydro-Electric Power LP owns the dam and power generating facility. This company allows public access in certain areas around the dam for recreational fishing. This area, however, needs to be better managed to control use, parking, and access to the site. The Town of Carlton and Orleans County need to work with the power company to evaluate potential improvements that will enhance public use and safety, as well as environmental preservation.

Improvements should also be made to Lakeside Beach State Park to increase public recreational opportunities. Although this park has a campground facility, a picnic area with playground equipment and an internal trail system, it is not utilized to its full potential. Of greatest significance if the lack of opportunities for public swimming. Understanding that public safety is an issue with access to the Lake Ontario shoreline, as well as the physical quality of the shoreline (rocky), the provision of a public swimming pool or similar water feature is needed. According to the State's Comprehensive Outdoor Recreation Plan, swimming is the third most popular recreational activity in New York State and the

second most requested recreational facility behind local parks. Orleans County is recognized in the Plan as having a fairly high need for this recreational use. As a means of increasing the level of public water-related recreation in the coastal area, he County and Town of Carlton should initiate outreach to the State to promote the addition of a swimming pool facility at Lakeside Beach State Park.

The following guidelines will be used in determining the consistency of a proposed action with this policy:

1. The existing access from adjacent or proximate public lands or facilities to public water related recreational resources and facilities shall not be reduced, nor shall the possibility of increasing access in the future from adjacent or proximate public lands or facilities to public water related recreation resources and facilities be eliminated, unless in the latter case, estimates of future use of these resources and facilities are too low to justify maintaining or providing increased public access, or unless such actions are found to be necessary by the public body having jurisdiction over such access as the result of a reasonable justification of the need to meet system-wide objectives.

   The following is an explanation of the terms used in the above guidelines:

   a. "Access" means the ability and right of the public to reach and use public coastal lands and waters in the coastal area.
   b. "Public water-related recreation resources or facilities" include all public lands or facilities that are suitable for passive or active recreation that requires either water or a waterfront location or are enhanced by a waterfront location.
   c. "Public lands or facilities" are lands or facilities held by State or local government in fee simple or less-than-fee simple ownership and to which the public has access or could have access, including underwater lands and the foreshore.
   d. "Reduction in the existing level of public access" includes, but is not limited to:

      (1) The number of parking spaces at a public water-related recreation resource or facility is significantly reduced.
      (2) The service level of public transportation to a public water-related recreation resource or facility is significantly reduced during peak season use and such reduction cannot be reasonably justified in terms of meeting system-wide objectives.
      (3) Pedestrian access is diminished or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines, or similar linear facilities.

(4) There are substantial increases in existing special fares (not to include regular fares in any instance) of public transportation to a public water-related recreation resource or facility; and/or admission fees to such a resource or facility except where the public body having jurisdiction over such fares determines that such substantial fare increases are necessary and an analysis shows that such increases will significantly reduce usage by individuals or families and incomes below the State government established poverty level.

e. "Elimination of the possibility of increasing public access in the future" includes, but is not limited to, the following:

(1) Construction of public facilities that physically prevent the provision, except at great expense, of convenient public access to public water-related recreation resources and facilities
(2) Sale, lease, or other transfer of public lands that could provide public access to a public water-related recreation resource or facility
(3) Construction of private facilities that physically prevent the provision of convenient public access to public water-related recreational resources or facilities from public lands and facilities

2. Any proposed project to increase public access to public water-related recreation resources and facilities shall be analyzed according to the following factors:
   a. The level of access to be provided should be in accordance with estimated public use. If not, the proposed level of access to be provided shall be deemed inconsistent with the policy.
   b. The level of access to be provided shall not cause a degree of use that would exceed the physical capability of the resource or facility. If this were determined to be the case, the proposed level of access to be provided shall be deemed inconsistent with the policy.

3. The State and the local municipalities will not undertake or fund any project that increases access to a water-related resource or facility that is not open to all members of the public.

Policy 20 Access to the publicly owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.

Policy 20A Promote increased/improved access to Lake Ontario along the Lake Ontario State Parkway.

Policy 20B Improve use of and access to public lands on Patterson Pond and Johnson Creek in the Village of Lyndonville.

Policy 20C Encourage the use of public street ends and right-of-ways for waterfront access compatible with adjacent uses and in conjunction with new multi-use projects in the coastal area.

Explanation of Policy

In coastal areas where there are little or no recreation amenities providing water-related activities, access to publicly owned lands along the waterfront should be provided for such activities and pursuits that require only minimal facilities for public enjoyment. Such access could provide opportunities for shoreline fishing, hiking, biking, scenic viewing of the shoreline, birdwatching, nature study and other activities. Several opportunities exist to increase access to the waterfront in the K-Y-C-L Waterfront Revitalization Area. These include:

1. Improving and expanding recreational use of Yates Town Park and the Yates Town Pier site.
2. Improving the terminus of North Lyndonville Road and Town Line Road in the Town of Yates for passive recreation (scenic viewing).
3. Improving the Lake Alice boat launch site in Waterport.
4. Re-activating the boat launch site in Lakeside State Park.

The Village of Lyndonville owns lands that border the south side of Patterson Pond and the dam for this pond, and Johnson Creek. The lands near the dam and along Johnson Creek are informally used for shoreline fishing and see an influx of fishermen during certain times of the year. Improvements to these Village-owned lands for shoreline fishing, as well as cartop boat launching and hiking, would increase public use and enjoyment of the area.

The State has jurisdiction over Lake Ontario State Parkway. This parkway, which presents a significant barrier to lake shore access has two unimproved turnoffs that are accessible from the westbound direction. These turnoffs should be improved to allow for public use. This should be taken into consideration as part

of the ongoing study of the rehabilitation and continued use of the parkway that is being conducted by Orleans County and the Genesee Transportation Council.

While publicly-owned lands referenced in the policy shall be retained in public ownership, traditional sales of easements on lands underwater to adjacent onshore property owners are consistent with this policy, provided such easements do not substantially interfere with continued public use of the public lands on which the easement is granted. Also, public use of such publicly owned underwater lands and lands immediately adjacent to the shore shall be discouraged where such use would be inappropriate for reasons of public safety or the protection of fragile coastal resources.

The regulation of projects and structures that are proposed to be constructed in or over lands underwater is necessary:

1. To responsibly manage such lands,
2. To protect vital assets held in public trust by the State,
3. To guarantee common law and sovereign rights, and
4. To ensure that waterfront owners' reasonable exercise of riparian rights and access to navigable waters shall be consistent with the public interest in reasonable use and responsible management of waterways and public lands for the purposes of navigation, commerce, fishing, bathing, recreation, environmental and aesthetic protection, and for access to the navigable waters and lands underwater of the State.

The following guidelines will be used in determining the consistency of a proposed action with this policy:

1. Existing access from adjacent or proximate public lands or facilities to existing public waterfront lands and/or waters shall not be reduced, nor shall the possibility of increasing access in the future from adjacent or nearby public lands or facilities to public coastal lands and/or waters be eliminated, unless such actions are demonstrated to be of overriding regional or Statewide public benefit or, in the latter case, estimates of future use of these lands and waters are too low to justify maintaining or providing increased access.

   The following is an explanation of the terms used in the above guidelines:

   g. A reduction in the existing or anticipated level of public access includes, but is not limited, to:

(1) Pedestrian access is diminished or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines, or similar linear facilities.
(2) Pedestrian access is diminished or blocked completely by public or private development.

h. An elimination of the possibility of increasing public access in the future includes, but is not limited to:

(1) Construction of public facilities which physically prevent the provision, except at great expense, of convenient public access to public coastal lands and /or waters
(2) Sale, lease, or other conveyance of public lands that could provide public access to public coastal lands and/or waters
(3) Construction of private facilities which physically prevent the provision of convenient public access to public coastal lands and/or waters from public lands and facilities

2. The existing level of public access within public coastal lands or waters shall not be reduced or eliminated.
3. Public access from the nearest public roadway to the shoreline and along the waterfront shall be provided by new land use or development, except where:

a. It is inconsistent with public safety, military security, or the protection of identified fragile coastal resources;
b. Adequate access exists within one-half mile; or
c. Agriculture would be adversely affected.

Such access shall not be required to be open to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the access way.

4. The State or local municipalities will not undertake or directly fund any project which increases access to a water-related resource or facility that is not open to all members of the public.
5. Proposals for increased public access to coastal lands and waters shall be evaluated according to the following factors:

a. The level of access to be provided should be in accord with estimated public use. If not, the proposed level of access to be provided shall be deemed inconsistent with the policy.

b. The level of access to be provided shall not cause a degree of use which would exceed the physical capability of the coastal lands or waters. If this were determined to be the case, the proposed level of access to be provided shall be deemed inconsistent with the policy.

6. In making any grant, lease, permit, or other conveyance of land now or formerly underwater, there shall be reserved such interests or attached such conditions to preserve the public interest in the use of state-owned lands underwater and waterways for navigation, commerce, fishing, bathing, recreation, environmental protection, and access to the navigable waters of the state. In particular, the granting of publicly owned underwater or formerly underwater lands to private entities will be limited to exceptional circumstances only.

Recreation Policies

Policy 21 Water-dependent and water-enhanced recreation will be encouraged and facilitated and will be given priority over non-water-related uses along the coast.

Explanation of Policy

Water-related recreation includes obviously water-dependent activities, such as boating, swimming and fishing, as well as certain activities that are enhanced by a waterfront location and increase the general public's access to the shoreline, such as multi-use trails, picnic areas, scenic overlooks and passive recreation areas that take advantage of scenic views of the waterfront. Development of water-related recreation in the K-Y-C-L Waterfront Revitalization Area will be consistent with the preservation and enhancement of important resources, such as fish and wildlife habitats, aesthetically significant areas, historic and cultural resources, and agriculture. Water-related recreational development will be increased in levels appropriate to demand and shall take preference over non-waterfront dependent uses. In addition, water-dependent recreational uses shall have a higher priority over water-enhanced recreation use.

The siting or design of new public development in a manner that would result in a barrier to the recreational use of a major portion of a community's waterfront should be avoided to the greatest extent possible. Among the types of water-dependent recreation, provision of adequate boating services to meet future demand is encouraged by this Program. The siting of boating facilities must be consistent with preservation and enhancement of other coastal resources and with their capacity to accommodate demand. The provision of new public boating facilities is essential in meeting this demand, but such public actions should avoid competition with private boating development. Boating facilities will, as appropriate, include parking, park-like surroundings, toilet facilities, and pump-out facilities. Harbors of Refuge, such as Point Breeze Harbor on Oak Orchard Creek, are needed Lake Ontario. There is also a need for a better

positional pattern of boating facilities to correct problems of overused, insufficient, or improperly sited facilities. This is particularly important in the Bridged area along Oak Orchard Creek.

The development of water-dependent recreational uses is the focus of this LWRP policy. The areas identified in the coastal area as appropriate for new or improved water-dependent and water-enhanced recreation include Yates Town Park, the Yates Pier in Shadigee, Village-owned lands along Patterson Pond and Johnson Creek in Lyndonville, Oak Orchard Marine Park and Point Breeze at the mouth of Oak Orchard Creek, and the Bridges area further up Oak Orchard Creek, In the area between the Bridges and Waterport Dam, along Oak Orchard Creek, no additional boating facilities should be developed and size and speed of vessels using this area should be restricted. The use of non-motorized vessels is encouraged along the length of Oak Orchard Creek, from Waterport Dam to Lake Ontario (See Policies 19 and 20).

Policy 22 Development when located adjacent to the shore will provide for water-related recreation whenever such use is compatible with reasonably anticipated demand for such activities and is compatible with the primary purpose of the development.

Explanation of Policy

Many developments in the waterfront area present practical opportunities for providing recreation facilities or uses as an additional use on the site. Whenever new developments are located adjacent to the shore, they should, to the fullest extent permitted by existing law and the physical constraints of the site, provide for some form of water-related recreation use unless there are compelling reasons why any form of such recreation would not be compatible with the development, or a reasonable demand for public water-related recreational use cannot be foreseen in the area.

The types of development that can generally provide water-related recreation as a multiple use include, but are not limited to parks, highways, utility transmission rights-of-way, schools, nature preserves (restricted to passive activities), residential subdivisions and commercial developments. Prior to taking action relative to any development proposal in the coastal area, the Towns and Village should determine if water-related recreation is feasible as a companion use. Such use should be consistent with LWRP policies and help to increase public use of the waterfront.

Historic and Scenic Resources Policies

Policy 23 Protect, enhance, and restore structures, districts, areas, or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities, or the Nation.

Explanation of Policy

Among the most valuable of the State's man-made resources are those structures or areas that are of historic, archaeological, or cultural significance. The protection of these structures and resources must involve a recognition of their importance by all agencies and the ability to identify and describe them. Protection must include concern not just with specific sites, but with areas of significance and the area around these specific sites. The policy is not to be construed as a passive mandate but must include active efforts, when appropriate, to protect, restore or revitalize historic resources through preservation and adaptive reuse. Efforts will be made to preserve historic and cultural resources that have a relationship to the waterfront. Historic, archaeological, and cultural resources that exist in the K-Y-C-L Waterfront Revitalization Area, and warrant protection or recognition under this policy, are identified in Section 2.8 of the Inventory and Analysis.

The structures, districts, areas, or sites that are historic, architectural, archaeological, or cultural significance include:

1. A resource that is on, nominated to be on, or determined eligible to be on the National or State Registers of Historic Places;
2. A resource on or nominated to be on the State Nature and Historic Preserve Trust;
3. An archaeological resource which is on the State Department of Education's inventory of archaeological sites; and
4. A local landmark, park, or locally designated historic district which is located within the boundary of an approved local waterfront revitalization program.

All practicable means to protect structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities or the Nation shall be deemed to include consideration and adoption of any techniques, measures or controls to prevent significant adverse change to such significant structures, districts, areas or sites. A significant adverse change includes but is not limited to:

1. Alteration of or addition to one or more of the architectural, structural, ornamental, or functional features of a building, structure, or site that is a recognized historic, cultural, or archaeological

resource, or component thereof. Such features are defined as encompassing the style and general arrangement of the exterior of a structure and any original or historically significant interior features including type, color and texture of building materials, entry ways and doors, fenestration, lighting fixtures, roofing, sculpture and carving, steps, rails, fencing, windows, vents and other openings, grillwork, signs, canopies, and other appurtenant fixtures and, in addition, all buildings, structures, outbuildings, walks, fences, steps, topographical features, earthworks, paving and signs located on the designated resource property. (To the extent they are relevant, the Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" shall be adhered to.)

2. Demolition or removal in full or part of a building, structure, or earthworks that is a recognized historic, cultural, or archaeological resource or component thereof, to include all those features described in (a) above plus any other appurtenant fixtures associated with a building, structure or earthwork.
3. All proposed actions within 500 feet of the perimeter of the property boundary of the historic, architectural, cultural, or archaeological resource and all actions within an historic district that would be incompatible with the objective of preserving the quality and integrity of the resource. Primary considerations to be used in making judgment about compatibility should focus on the visual and location relationship between the proposed action and the special character of the historic, cultural, or archaeological resource. Compatibility between the proposed action and the resource means that the general appearance of the resource should be reflected in the architectural style, design material, scale, proportion, composition, mass, line, color, texture, detail, setback, landscaping and related items of the proposed actions. With historic districts, this would include infrastructure improvements or changes, such as street and sidewalk paving, street furniture and lighting.

This policy shall not be construed to prevent the construction, reconstruction, alteration, or demolition of any building, structure, earthworks, or component of a recognized historic, cultural or archaeological resource that has been officially certified as being imminently dangerous to life or public health. Nor shall the policy be construed to prevent the ordinary maintenance, repair or proper restoration, according to the U.S. Department of Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings", of any building, structure, site or earthwork or component of a recognized historic, cultural or archaeological resource that does not involve a significant adverse change to the resource, as defined above.

Policy 24 Prevent impairment of scenic resources of statewide significance.

Explanation of Policy
There are no scenic resources of statewide significance in the K-Y-C-L waterfront revitalization area. Therefore, this Local Waterfront Revitalization Program Policy is not applicable.

Policy 25 Protect, restore, or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.

Explanation of Policy:
The K-Y-C-L Waterfront Revitalization Area extends along the Lake Ontario shoreline and major creek corridors in the area. While the scenic resources in the coastal area are not of Statewide significance, they contribute to the overall character and visual quality of the area. The Lake Ontario waterfront provides countless scenic views and contains scenic resources that enhance the viewing experiences for travelers, boaters, and others (see Section 2.8.4 of the Inventory and Analysis). Portions of State Route 18 that extend through the coastal area and Lake Ontario State Parkway are segments of the New York State Great Lakes Seaway Trail and are designated National and State Scenic By-Ways. As the Lake Ontario waterfront offers significant scenic views, it should also be considered for further designation as a Scenic Area of Statewide Significance.

Activities that could impair or further degrade scenic quality along the New York Great Lakes Seaway Trail and National Scenic Byways, such as irreversible modification of natural landforms or the installation of structures that would impact views of the shoreline, should be avoided. In accordance federal requirements for National Scenic Byways, views of Lake Ontario must be protected and improved, wherever possible, and the erection of any off-premise signs is prohibited. This is enforced through legislative and development rules and regulations of the New York State Sign Program that control signage along specific highways.

In determining which features are locally significant when undertaking any development or other action within the coastal area, the following criteria are to be used:

1. Quality: The water, landforms, and man-made components of scenic waterfront landscapes exhibit variety of line, form, texture, and color, without so much variety as to be chaotic. Scenic coastal landscapes also exhibit unity of components, without being monotonous.
2. Uniqueness: The uniqueness of high-quality scenic landscapes is determined by the frequency of occurrence of similar resources in a region of the State or beyond.

3. Public Accessibility: A scenic resource of significance must be visually and, where appropriate, physically accessible to the public.
4. Public Recognition: widespread recognition of a scenic resource demonstrates people's appreciation of the resource for its visual, as well as evocative, qualities. Public recognition serves to reinforce analytic conclusions about the significance of a resource.

The following siting and facility-related guidelines are to be used to achieve this policy, recognizing that each development situation is unique and that the guidelines will have to be applied accordingly, on a site-specific basis. Guidelines include:

1. Avoiding loss or existing visual access and protecting view corridors provided by local roadways and other public areas that lead to the waterfront and using structural design and building techniques when siting new development to preserve and retain access and minimize obstruction of views.
2. Siting structures and other development, such as highways, power lines, and signs, back from the shoreline or in other inconspicuous locations to maintain the attractive quality of the waterfront area and to retain views to and from the shore;
3. Clustering or orienting structures to retain open views and provide view corridors, save open space, and provide visual organization to a development;
4. Incorporating existing structures (especially historic buildings) into the overall development scheme;
5. Removing deteriorated and/or degrading elements;
6. Maintaining or restoring the original land form, except when changes screen unattractive elements and/or add appropriate interest without adversely impacting import viewsheds;
7. Maintaining or adding vegetation to provide interest, create habitat to encourage the presence of wildlife, blend structures into the site, and obscure unattractive elements.
8. Allow selective clearing only where such clearing removes unsightly, diseased, or hazardous vegetation and creates views of coastal waters without adversely impacting the overall viewshed;
9. Using appropriate materials, in addition to vegetation, to screen unattractive elements;
10. Using appropriate scale, form, and materials to ensure that buildings and other structures are compatible with, and add interest to, the landscape.

The siting and design guidelines listed above shall be adhered to and enforces through site plan and SEQR review for new development and redevelopment within the Waterfront Revitalization Area. More emphasis may need to be placed on removal of existing elements, especially those that degrade, and on the addition of new elements or other changes that enhance visual quality.

Agricultural Lands Policy

Policy 26 Conserve and protect agricultural lands in the State's coastal area.

Explanation of Policy

Agriculture is a prominent land use in the Towns of Yates, Carlton, and Kendall. As noted in Section 2.5 of the Inventory and Analysis, agricultural uses account for 21.5% (3,264 acres) of overall land use in the coastal area. This includes field crops, fruit orchards and other agricultural uses and activities. Certain agricultural lands in the coastal area are located within designated Orleans County Agricultural District No.1.

There are many factors, such as markets, taxes, and regulations, that influence the viability of agriculture in a given area, which can only be addressed on a Statewide or national basis. To be practical, implementing a policy that promotes the protection of agriculture must concentrate on controlling the replacement of agricultural land uses with non-agricultural uses. This policy requires a concern for the loss of any important agricultural land in the K-Y-C-L Waterfront Revitalization Area. However, the primary concern must be with the loss of agricultural land when such loss would have a significant effect on an ability of agricultural use in the area to continue to exist, prosper and/or expand.

It must be determined whether a proposed action would result in the loss of important agricultural lands as identified in the waterfront area. If it is determined that an action would result in the loss of identified agricultural lands, but that loss would not have an adverse effect on the viability of agriculture in the surrounding area, then the action may be deemed consistent with this policy. However, such action must be undertaken in a manner that would minimize the loss of important farmland. If the action is determined to result in a significant loss of important agricultural land or farm soils, then the action is not consistent with this agriculture policy.

The following guidelines define what must be considered in making the above determinations:

1. The action would likely result in significant impairment to the viability of an important agricultural area if:

    a. The action would occur on identified agricultural land and would:

        (1) Consume more than 10 percent of the land of an active farm,
        (2) Consume a total of 100 acres or more of identified important agricultural land, or

(3) Divide an active farm with identified important agricultural land into two or more parts, thus impeding efficient farm operation or reducing the size of farmed acreages to less than 25 acres.

b. The action would result in environmental changes that may reduce the productivity or adversely affect the quality and use of any identified agricultural lands.
c. The action would create real estate market conditions favorable to the conversion of large areas of identified agricultural land to non-agricultural uses. Such conditions may be created by:

(1) The extension of public water or sewer facilities to serve non-farm structures.
(2) Transportation improvements, except for maintenance of and safety improvements to, existing facilities that serve non-farm or non-farm related development.
(3) Major non-agribusiness commercial development adjacent to identified agricultural lands.
(4) The development of major public institutions in the surrounding area.
(5) Development of residential uses other than farm dwellings.
(6) Any change in land use regulations applying to agricultural land that would encourage or allow land uses that are incompatible with the agricultural use of the land.

2. The following types of facilities and activities should not be construed as having adverse effects on the preservation of agricultural land:

a. Farm dwellings, barns, silos, and other accessory uses and structures incidental to agricultural production or necessary for supplementing farm family income.
b. Agricultural business development, which includes the entire structure of local support services and commercial enterprises necessary to maintain an agricultural operation.

3. In determining whether an action that would result in the loss of farmland is of overriding regional or statewide benefit, the following factors should be considered:

a. For an action to be considered overriding, it must be shown to provide significantly greater benefits to the region or State than are provided by the affected agricultural area (not merely the land directly affected by the action). In determining the benefits of the affected agriculture to the region or State, consideration must be given to its social and cultural value, economic viability, environmental benefits, existing and potential contribution to food or fiber production in the State, and any State food policy, as well as its direct economic benefits.

(1) An agricultural area is an area predominantly in farming and in which the farms produce similar products and/or rely on the same agribusiness support services and are to be a significant degree economically interdependent. At a minimum, this area should consist of at least 500 acres of identified important agriculture land. For the purpose of analyzing impacts of any action on agriculture, the boundary of such area need not be restricted to land within the coastal boundary. If the affected agricultural lands lie within an agricultural district then, at a minimum, the agricultural area should include the entire agricultural district.

(2) In determining the benefits of an agricultural area, its relationship to agricultural lands outside the area should also be considered.

(3) The estimate of the economic viability of the affected agricultural area should be based on an assessment of:

i soil resources, topography, conditions of climate and water resources.
ii availability of agribusiness and other support services, and the level and condition of investments in farm real estate, livestock, and equipment.
iii the level of farming skills as evidenced by income obtained, yield estimates for crops, and costs being experienced with the present types and conditions of buildings, equipment, and cropland.
iv use of new technology and the rates at which new technology is adopted.
v competition from substitute products and other farming regions and trends in total demand for given products.
vi patterns of farm ownership for their effect on farm efficiency and the likelihood that farms will remain in use.

(4) The estimate of the social and cultural value of farming in the area should be based on an analysis of:

i the history of farming in the area.
ii the length of time farm properties have remained in one family.
iii the degree to which farmers in the area share a cultural or ethnic heritage.
iv the extent to which products are sold and consumed locally.
v the degree to which a specific crop(s) has become identified with a community.

(5) An estimate of the environmental benefits of the affected agriculture should be based on analysis of:

i the extent to which the affected agriculture as currently practiced provides a habitat or food for wildlife.
ii the extent to which a farm landscape adds to the visual quality of an area.
iii any regional or local open space plans, and degree to which the open space contributes to air quality.
iv the degree to which the affected agriculture does, or could, contribute to the establishment of a clear edge between rural and urban development.

4. Whenever a proposed action is determined to have an insignificant adverse effect on identified important agricultural land or whenever it is permitted to substantially hinder the achievement of the policy according to NYSDOS regulations, Part 600, or as a result of the findings of an Environmental Impact Statement, then the required minimization should be undertaken in the following manner:

a. The proposed action shall, to the extent practicable, be sited on any land not identified as important agricultural land or, if it must be sited on identified important agricultural land, it should be done in a manner that avoids disturbance of land according to the following priority:

(1) Prime or unique farmland in orchards or vineyards,
(2) Other prime farmland in active farm production,
(3) Farmland of Statewide importance in active farm production,
(4) Active farmland identified as having high economic viability,
(5) Prime farmland not being actively farmed, and
(6) Farmland of Statewide importance not being actively farmed.

4. Where possible, development should be undertaken in a manner, such as conservation subdivision or clustering, that preserves land for continued and/or future agricultural use through such means as lease arrangements with farmers, direct undertaking of agriculture, or sale of surplus land to farmers. Agricultural use of such land shall have priority over any other proposed multiple use of the land.

Energy and Ice Management Policies

Policy 27 Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

The Kendall-Yates-Carlton-Lyndonville (KYCL) waterfront revitalization area is a mostly rural community devoid of large hills, consisting mostly of flat terrain. The area has very few tall structures. The waterfront revitalization area contains clusters and stretches of homes and small businesses along the Lake Ontario shoreline, as well as disbursed dwellings that residents have chosen as their homes, often because of a love for rural-pastoral lifestyle. The Towns and their residents desire to protect the open, rural, and natural character of the land, as well as its lakefront vistas. Significant public benefit in quality of life and economic robustness is derived from the Lake Ontario lakeshore due to its unique connection to the LWRP communities (see LWRP Section 2.8.4 – Scenic Resources and Maps 7A-C). More specifically, the Towns and residents want to encourage the use of the Lake Ontario waterfront as a beneficial resource and to protect it from incompatible uses that may compromise the aesthetic quality and character of the area, increase the potential for flooding and erosion, or damage the natural environment in a way that restricts its use and enjoyment by residents and visitors to the waterfront.

The land area comprising the KYCL waterfront revitalization constitutes not only a world-class viewshed of Lake Ontario, but is a well-documented national resource of lake shore migratory bird flyways and habitats. In the spring and fall, migrating birds from as far south as South America and as far north as northern Canada result in concentrated streams of birds flying along the Lake Ontario littoral zone.

Decisions siting wind energy facilities within view of or from the local waterfront revitalization area must take into consideration potential impacts on scenic, cultural, historical and archaeological resources, avian and bat populations, use of Lake Ontario waterfront, human health, local property values, noise, and agriculture. Any substantial degradation to these resources should be avoided. It should be noted that the April 2019 adoption of the Western Orleans Comprehensive Plan by the Towns of Yates, Ridgeway and Shelby and the Villages of Lyndonville and Medina recognizes that, “the Town of Yates… has myriad environmental factors influencing the siting of large-scale wind energy… [including] preserving Lake Ontario viewsheds, protecting migratory avian flyways, and preventing any negative health impacts on all residents (p. 193).”

Major energy generating facility along Lake Ontario can affect avian flyways and habitats. The United States Fish and Wildlife Service (USFWS) states that, "[T]he risks to wildlife from operating wind turbines could rise to severe levels. Previously, the Service has recommended that wind energy projects

be constructed at least three miles from the shoreline of the Great Lakes to reduce this risk" (May 6, 2015, USFWS letter to NYSDOS specifically referencing the Towns of Yates and Somerset). This recommendation was, in part, why the Town of Yates Wind Energy Conversion Systems (WECS) Zoning Law was revised on February 22, 2018 to read, "No WECS shall be allowed within the following setbacks - from the Lake Ontario shoreline: Three miles" (Section 591, para H.2.a.iii.).

Development of onshore uses and resources, including renewable energy resources, must take into consideration potential impacts on wildlife and wildlife habitat, as well as impacts on human health and quality of life. Any substantial degradation to these resources should be avoided.

Policy 28 Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

Explanation of Policy

There are no ice management practices undertaken within the K-Y-C-L Waterfront Rev Area. Prior to undertaking actions required for ice management, an assessment must be made of the potential effects of such actions upon the production of hydro-electric power, fish and wildlife and their habitats. Following such an examination, adequate methods of avoidance or mitigation of such potential effects must be utilized if the proposed action is to be implemented.

Policy 29 The development of offshore uses and resources, including renewable energy resources, shall accommodate New York's long-standing ocean and Great Lakes industries, such as commercial and recreational fishing and maritime commerce, and the ecological functions of habitats important to New York.

Explanation of Policy

The science of ecosystem connections between the coastal zone and offshore areas is increasingly better understood. The offshore environment is an ongoing focus of policy development at national, regional, and state levels. Within this context, New York State seeks to accommodate longstanding offshore industries, such as commercial and recreational fishing and maritime commerce, while at the same time ensuring the ecological functioning of habitats important to the State as it considers the need for new offshore resource development and uses to occur.

While New York State has jurisdiction in its offshore waters, matters pertaining to the outer continental shelf (OCS) are under the jurisdiction of the federal government. However, offshore resource development and other uses on the OCS may affect coastal resources and uses important to New York.

Consequently, the Department of State actively participates in OCS planning and decision making processes pursuant to the federal Outer Continental Shelf Lands Act and the Deepwater Port Act, among other federal statutes, and reviews and voices the State's concerns about federal OCS activities, licenses, permits, lease sales, plans, and other uses and activities. The federal government increasingly has invited State participation in offshore planning and decision-making processes. New York will continue to review and analyze federal licensing and permitting activities for federal consistency, including activities in offshore areas outside New York's coastal zone. Proponents of offshore activities should use available offshore data to identify and reduce the potential effects on New York's coastal resources, activities and uses. Project proponents should consider the compatibility with, and seek to accommodate, the existing presence of resources, activities and uses that are important to the coastal area of New York State.

In addition to the development of energy resources and the siting of energy facilities, offshore uses of particular concern to New York State because of their potential effects on State coastal uses and resources include, but are not limited to:

1. Fisheries management, including sport fishing and aquaculture.
2. Sand and gravel mining.
3. Military readiness training and related exercises.
4. changes or upgrades to established navigation patterns and infrastructure, including the re-routing of existing navigation lanes and the location, placement or removal of navigation devices which are not part of the routine operations under the Aids to Navigation (ATON) program.
5. Permits for deepwater ports.
6. The identification of interim or permanent open water dredged material disposal sites.
7. The intentional submergence of vessels and other structures, including for the purpose of creating artificial reefs.
8. The creation of human-made islands or the installation of other fixed structures.
9. Scientific research activities; and
10. Exploration and identification of potential resources for extraction, such as biopharmaceutical products.

In its review of proposed activities, licenses, permits, lease sales and plans in New York State coastal waters, the Department of State works with state and federal agencies to considers a number of factors, including but not limited to:

1. The potential effects upon maritime traffic, including navigational safety leading into and from New York's ports and harbors.
2. The potential for increased port development and economic activity.

3. Aspects of national security.
4. The effects on important finfish, crustaceans, shellfish, seabirds, marine mammals and other wildlife populations and their spawning, wintering, and foraging habitats and migrating corridors.
5. Impacts on biological communities and biodiversity.
6. Ecological functioning of ecosystems.
7. Economic and other effects upon commercial and recreational fishing activities.
8. Impacts upon tourism and public recreational resources and opportunities along the shoreline and in offshore areas.
9. The potential for geo-hazards.
10. Water quality; and
11. The overall effects on the resilience of New York's coastal uses and resources.

The open waters of Lake Ontario offer some of the finest freshwater fishing in the world for king salmon (chinook), Coho salmon, brown trout, lake trout, steelhead/rainbow trout and bass. Sport fishing on Lake Ontario is one of the most popular recreational activities in the area. Many different fishing charters and derbies run throughout the year and generate significant tourism dollars for the region. Recreational boating is very popular during the spring, summer and fall seasons. These activities extend into Lake Ontario and include motorboating, waterskiing, sailing and other related water sports.

Lake Ontario is a very important corridor and feeding ground for migratory birds. In the spring and fall, migrating birds from as far south as South America and as far north as northern Canada result in concentrated streams of birds flying over and around Lake Ontario. Bird watching is one of the fastest growing outdoor recreational activities, which can be enjoyed by all ages and experiences. Bird watching associated with migratory birds occurs inland and along the shoreline, but also extends into Lake Ontario.

The Great Lakes-St. Lawrence Seaway is a deep draft waterway extending 2,340 miles from the Atlantic Ocean to the head of the Great Lakes. The St. Lawrence Seaway portion of the system extends from Montreal to mid-Lake Erie. The Great Lakes and the St. Lawrence River are major North American trade arteries and serve mariners, farmers, factory workers, and commercial interests from the western prairies to the eastern seaboard. Virtually every commodity imaginable travel over the Great Lakes – St. Lawrence Seaway System. Annual commerce on the system exceeds 200 million net tons. Great Lakes shipping lanes are located approximately three miles from the Towns of Yates, Carlton, and Kendall lakeshore boundaries.

Lake Ontario is the source of drinking water for a significant portion of the local population. There are two major water intakes that extend into Lake Ontario from within the KCYL waterfront revitalization

area. One intake is located at the terminus of NYS Route 63 in the Town of Yates and the other intake is located at the terminus of Wilson Road in the Town of Carlton, just east of Lakeside Beach State Park.

Development of offshore uses and resources, including renewable energy resources, must take into consideration potential impacts on fish populations, fish and wildlife habitat, water-dependent recreation including fishing and boating, commercial shipping, navigation and drinking water intakes. Any substantial degradation to these resources should be avoided.

Water and Air Resources Policies

Policy 30 Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to State and National water quality standards.

Explanation of Policy

Municipal, industrial, and commercial discharges include not only "end-of-the pipe" discharges into surface and groundwater but also plant site runoff, leaching, spillages, sludge and other waste disposal, and drainage from raw material storage sites. Regulated industrial discharges are both those which directly empty into receiving coastal waters and those which pass through the municipal treatment systems before reaching the State's waterways. The discharge of any and all pollutants from municipal, industrial or commercial uses into Lake Ontario or its tributaries shall conform to State and Federal water quality standards and be in full compliance with all applicable regulations.

Policy 31 State coastal area policies and management objectives of approved local Waterfront Revitalization Programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

Explanation of Policy

Pursuant to the Federal Clean Water Act of 1977 (PL 95-217) the State has classified its coastal and other waters in accordance with considerations of best usage of these waters in the interest of the public and has adopted water quality standards for each class of waters. These classifications and standards are reviewable at least every three years for possible revision or amendment. Local Waterfront Revitalization Programs and State coastal management policies shall be factored into the review process for coastal waters. However, such consideration shall not affect any water pollution control requirement established by the State pursuant to the federal Clean Water Act.

The State has identified certain stream segments as being either "water quality limiting" or "effluent limiting." Waters not meeting State standards, and which would not be expected to meet these standards even after applying "best practicable treatment" to effluent discharges are classified as "water quality limiting". Those segments meeting standards or those expected to meet them after application of "best practicable treatment" are classified as "effluent limiting," and all new waste discharges must receive "best practicable treatment." However, along stream segments classified as "water quality limiting", waste treatment beyond "best practicable treatment" would be required, and costs of applying such additional treatment may be prohibitive for new development.

Policy 32 Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

Explanation of Policy

Alternative systems include individual septic tanks and other subsurface disposal systems, dual systems, small systems serving clusters of households or commercial users, and pressure or vacuum sewers. These types of systems are often more cost effective in smaller, less densely populated communities and for which conventional facilities are too expensive. Proper maintenance practices for these systems shall be promoted to protect water quality and to ensure they are functioning effectively.

Policy 33 Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Explanation of Policy

Best management practices include both structural and non-structural methods for preventing and mitigating point and non-point source pollution caused by the discharge of stormwater runoff and combined sewer overflows. There are no combined sewer overflows in the K-Y-C-L Local Waterfront Area.

At present, structural approaches to controlling stormwater runoff (e.g., construction of retention basins) are not economically feasible. Proposed amendments to the Clean Water Act could authorize funding to address water quality issues. Until funding for such projects becomes available, non-structural approaches (e.g., improved street cleaning, reduced use of road salt) will be encouraged.

Policy 34 Discharge of waste materials into coastal waters from vessels subject to State jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

Explanation of Policy

Sanitary waste from boats and other vessels often contains harmful levels of pathogens and chemicals, such as formaldehyde, phenols, and chlorine, which severely harm water quality, pose a risk to public health, and impair marine life and habitats. The waters of Lake Ontario are a State-designated vessel waste no-discharge zone. All sanitary waste from vessels is prohibited from being discharged into the surface waters of the K-Y-C-L Waterfront Revitalization Area, which includes the offshore waters in Lake Ontario. Boaters using local surface waters in the Lake and creeks are prohibited from discharging sanitary or other vessel wastes into these waters and are required to utilize available vessel waste pump-out facilities for proper waste disposal. Vessel waste pump-out facilities are available at a number of marinas in the coastal area.

Policy 35 Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing State dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.

Explanation of Policy

Dredging, filling, and dredge material disposal are activities that are typically necessary in waterfront communities. Activities such as the maintenance of navigation channels at sufficient depths or pollutant removal are required to support recreation and commercial boating activity and protect environmental resources. Such projects, however, may adversely affect water quality, fish and wildlife habitats, wetlands, and other important coastal resources. These adverse effects can be minimized through careful design and timing of dredging or filling activities, proper siting of dredged material disposal sites, and the beneficial use of dredged material. Such projects shall only be permitted in the K-Y-C-L Waterfront Revitalization Area if they satisfactorily demonstrate that any anticipated adverse effects will be reduced to levels that satisfy State permit standards set forth in regulations developed pursuant to the NYS Environmental Conservation Law (Article 15 – Water Resources, Article 24 – Freshwater Wetlands and Article 34 – Coastal Erosion Hazard Areas) and are consistent with policies that pertain to the protection and use of coastal resources (LWRP policies 7, 15, 19, 20, 25, 26, and 44).

Policy 36 Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

Explanation of Policy

There are no major facilities in the K-Y-C-L Local Waterfront Revitalization Area that store or ship petroleum or other hazardous materials. Some small scale uses, including marinas in the Point Breeze, Bridges and Eagle Creek areas provide vessel fueling stations, which are regulated by the New York State Department of Environmental Conservation. These facilities are required to operate in full compliance of all State and federal regulations (also see Policy 39).

Policy 37 Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics, and eroded soils into coastal waters.

Explanation of Policy

Non-point source pollution is pollution that reaches a surface water body through unconfined or indiscrete means. Examples include:

1. Stormwater sheet runoff or overland flow (i.e. – unchanneled flow from paved surfaces, buildings, and construction sites), which carries animal wastes, soil and sediment, road oil and other automotive by-products, agricultural pesticides, and fertilizer; and
2. groundwater infiltration that carries contaminants from faulty cesspools or septic tanks or toxins and contaminants from other sources of pollution.

Best management practices (BMPs) used to reduce non-point sources of pollution shall include, but are not limited to:

1. Reducing or eliminating the introduction of materials that may contribute to non-point pollution,
2. Minimizing disturbances to the banks and beds of local creeks and streams to prevent soil erosion and adverse impacts to turbidity, velocity, temperature, and water level;
3. Reducing applications of residential, agricultural, and commercial fertilizers and pesticides;
4. Increased organic farming and pest management practices;
5. Proper care and maintenance of on-site septic systems;
6. Proper disposal of pet wastes and automobile waste oil and other waste products;
7. Soil erosion control practices (such as vegetative buffers and soil stabilization techniques);
8. Surface drainage control techniques;

9. Prohibiting direct and indirect discharges of refuse or litter (floatables) into surface waters; and
10. Public education efforts (workshops, literature, etc.).

Non- structural BMPs are relatively inexpensive as compared to the costs of employing structural measures to mitigate pollution. The Orleans County Soil and Water Conservation District (SWCD) is focused on improving water quality and is the lead agency for County's Water Quality Coordinating Committee. This committee develops and implements water quality strategies for addressing non-point source pollution issues that impact local surface water quality and aquatic ecosystems. This agency will be consulted when undertaking projects and other activities for remedying non-point source pollution.

Policy 38 The quality and quantity of surface water and groundwater supplies, will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.

Explanation of Policy

Surface and groundwater are the principal sources of drinking water within the K-Y-C-L Waterfront Revitalization Area and, therefore, protection of these resources is essential for meeting future demands. In general, areas with denser residential, primarily along the shoreline and in the Village of Lyndonville, are served by public water systems with service mains, with water provided from Lake Ontario. Water quality in local creeks and tributaries must be protected from degradation to ensure acceptable water quality in the Lake. In areas without public water, residents depend upon individual wells. These wells must be protected from contamination, particularly from on-site septic systems and agricultural chemicals. As the majority of the coastal area has no public sanitary sewer service, zoning will be used to maintain appropriate development densities to ensure the protection of groundwater resources.

Policy 39 The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.

Explanation of Policy

Under this policy, solid wastes include sludge from air or water pollution control facilities, demolition and construction debris and industrial and commercial wastes. Hazardous wastes are unwanted byproducts of manufacturing processes and are generally characterized as being flammable, corrosive, reactive, or toxic. More specifically, hazardous waste is defined in Environmental Conservation Law (Section 27-0901[3]), as "waste or combination of wastes which because of its quantity, concentration, or physical, chemical or infectious characteristics may: 1) cause, or significantly contribute to an increase in

mortality or an increase in serious irreversible, or incapacitating reversible illness; or 2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed, transported or otherwise managed." Examples of solid waste management facilities include resource recovery facilities, sanitary landfills, and solid waste reduction facilities. Although a fundamental problem associated with the disposal and treatment of solid wastes is the contamination of water resources, other related problems may include filling of wetlands and littoral areas, atmospheric loading, and degradation of scenic resources.

There are no facilities in the K-Y-C-L Local Waterfront Revitalization Area that store or treat solid or hazardous wastes. Solid waste and hazardous substances and materials that are transported through the coastal area should be done so using routes and methods that protect the safety, well-being, and general welfare of the public; the environmental resources of the Towns, Village, County and State; and using transportation corridors and highways that are properly designated for such transport.

Policy 40 Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

Explanation of Policy

There are no major steam electric generating or industrial facilities that discharge into coastal waters in the K-Y-C-L Waterfront Revitalization Area. Therefore, this Policy is not applicable.

Policy 41 Land use or development in the coastal area will not cause national or State air quality standards to be violated.

Explanation of Policy

New York's Coastal Management Program incorporates the air quality policies and programs developed for the State by the Department of Environmental Conservation pursuant to the Clean Air Act and State laws on air quality. The requirements of the Clean Air Act are the minimum air quality control requirements applicable within the coastal area. To the extent possible, the State Implementation Plan will be consistent with coastal lands and water use policies. Conversely, coastal management guidelines and program decisions with regard to land and water use and any recommendations with regard to specific sites for major new or expanded industrial, energy, transportation, or commercial facilities will reflect an assessment of their compliance with the air quality requirements of the State Implementation Plan.

There are no land uses in the K-Y-C-L Waterfront Revitalization Area that manufacture chemicals or conduct other activities likely to violate State air quality standards. Such uses or activities would not be compatible with this local program.

Policy 42 Coastal management policies will be considered if the State reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.

Explanation of Policy

The policies of the State and local coastal management programs concerning proposed land and water uses and the protection and preservation of special management areas will be taken into account prior to any action to change prevention of significant deterioration land classifications in coastal regions or adjacent areas. In addition, the NYS Department of State will provide the NYS Department of Environmental Conservation with recommendations for proposed prevention of significant deterioration land classification designations based upon State and local coastal management programs.

Policy 43 Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.

Explanation of Policy

There are no land uses or activities located or undertaken in the K-Y-C-L Waterfront Revitalization Area that generate air pollutants that contribute to the generation of acid rain. Furthermore, there are no areas in coastal area where such industrial development could occur. Energy generating and transmission facilities are considered inappropriate uses that would not provide significant public benefit to the area. Therefore, this policy is not applicable.

Wetlands Policy

Policy 44 Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

Policy 44A Productive wetlands and marsh habitats of local significance will be maintained where important fish and wildlife production can be demonstrated.

Explanation of Policy

Freshwater wetlands include marshes, swamps, bogs, and flats supporting aquatic and semiaquatic vegetation and other wetlands so defined in the NYS Freshwater Wetlands Act and the NYS Protection of

Waters Act (Water Resources Law, Environmental Conservation Law Article 15). There are no tidal wetlands within the K-Y-C-L Waterfront Revitalization Area.

The benefits derived from the preservation of freshwater wetlands include but are not limited to:

1. Habitat for wildlife and fish, including a substantial portion of the State's recreational fish species, and contribution to associated aquatic food chains;
2. Erosion, flood, and storm control;
3. Natural pollution treatment;
4. Groundwater protection;
5. Recreational opportunities;
6. Educational and scientific opportunities; and
7. Aesthetic open space.

The New York State Freshwater Wetlands Act (Article 24 of the NY State Environmental Conservation Law) protects all wetlands of 12.4 acres (5 hectares) in area or larger, as well as the land area within 100 feet of protected wetlands. A permit is required from the State to conduct any regulated activity within a designated wetland area or the 100-foot buffer area.

Federal jurisdictional wetlands are regulated by the U.S. Army Corps. of Engineers (ACOE) under Section 404 of the Clean Water Act, irrespective of their size, and Section 10 of the Rivers and Harbors Act of 1899. A permit is required from the ACOE for any structure or activity that takes place in, under, or over a navigable waterway or wetland area located adjacent to navigable waters (such as dock construction, dredging, and shoreline protection). Furthermore, any land use or activity that involves a discharge of dredge spoil material or placement of fill material into navigable waters or associated wetlands requires a permit, as well as activities that would drain or flood wetlands or significantly disturb the soil (such as land clearing, ditching, stream channelization, and excavating).

Certain activities that impact streams or streambeds, including impoundments and watercourse alteration, may also require the issuance of a Protection of Waters permit (Water Quality Certification) from the NYSDEC, pursuant to Article 15 of the Environmental Conservation Law.

Freshwater wetlands in the coastal area include approximately 35 acres of NYSDEC-regulated wetlands along the lower reach of Marsh Creek and numerous federal jurisdictional freshwater wetlands along Oak Orchard Creek, Johnson Creek, Sandy Creek, and other creek corridors in the coastal area. Although shoreline development, bulkheading and the installation of other shoreline protection structures, dredging and other stream modifications have impacted wetland habitat, there are still extensive areas of

jurisdictional freshwater wetlands along the creek corridors that provide wildlife habitat, help to manage local flooding and generate economic benefits. Pursuant to existing State and Federal regulations, all actions proposed within the coastal area must be assessed to determine potential impacts to existing wetlands and applicable wetland buffer areas, and a proper permit(s) must be secured for any activity, as required, prior to commencement of such activity.

In addition, the upper reaches of Marsh Creek, Bald Eagle Creek and portions of Johnson and Sandy Creeks provide locally significant wetland and wildlife habitat that also warrants protection. Activities proposed on or near these waterbodies in the coastal area should be properly evaluated to identify and avoid actions that would impair the ecological quality of these areas.

SECTION IV Proposed Land and Water Uses and Proposed Projects

This section of the Local Waterfront Revitalization Program (LWRP) describes the proposed land and water uses for the Kendall-Yates-Carlton-Lyndonville (KYCL) waterfront revitalization area (WRA). Proposed projects are also briefly described in this section. The Proposed Land Use and Projects maps (Maps 11A – 11C), illustrate proposed land use patterns and identify the general location of proposed projects within the LWRP area.

4.1 Proposed Land Uses

Land uses in the Kendall-Yates-Carlton-Lyndonville WRA are proposed in a manner that will continue the general patterns of existing development in each subarea. Therefore, future land uses implementing the LWRP will be an extension of current land use, as illustrated on Maps 3A – 3C. Recommendations have been included to capitalize on opportunities to improve recreational amenities and public access to the shoreline, wherever possible. The long-range goal for the KYCL waterfront is to make necessary improvements for residents to maintain the existing quality of life, enhance public access in appropriate places, capitalize on opportunities for waterfront-related economic development, improve water quality and maintain and enhance public recreation.

Town of Yates

The WRA in the Town of Yates is developed with numerous single-family residential dwellings located along the Lake Ontario shoreline, north of Lake Shore Road. These concentrated residential areas and hamlets are intermixed with a small number of large agricultural properties and areas of open space located further inland from the residential uses. Current land uses shall be continued in the Town's WRA, with minor changes in a few locations to accommodate additional residential use along the shoreline (primarily in-fill development). Efforts are also needed to improve public access to the shoreline and through the area, particularly between Lake Ontario shoreline in the Town and the Village of Lyndonville. This can be accomplished through the creation of multi-use pathways along County Line Road, North Lyndonville Road and Morrison Road. Improvements to the Town-owned land at the terminus of North Lyndonville Road, and to Yates Town Park at the end of Morrison Road, are proposed to enhance public recreation opportunities and access to the lake.

Village of Lyndonville

The WRA in the Village of Lyndonville primarily contains agricultural land, unimproved public lands, public services and open space, which all have access to Johnson Creek. Current land uses shall be continued with changes in a few locations to accommodate the improvement of Village-owned lands for public recreation (parkland and fishing access) along the north side of Johnson Creek and the south side of Patterson Pond. A multi-use pathway is also proposed for North Main Street that would be extended north through the Town of Yates to the Lake Ontario shoreline in Shadigee.

Town of Carlton

The WRA in Carlton includes lands along Lake Ontario, Oak Orchard Creek, Marsh Creek and Lake Alice in Waterport. The land uses in this area are expected to continue with not much large-scale change. Infill residential development is expected along the lakeshore, west and east of Point Breeze. Enhancements are recommended for Lakeside Beach State Park and Oak Orchard State Marine Park. The marine commercial environment in Point Breeze and along Oak Orchard Creek, north of the Bridges area, shall be maintained and enhanced to support continued recreational tourism. Existing locations for public access shall be maintained and enhanced, as needed. Land uses along Marsh Creek and the Oak Orchard Creek corridor, south of the Bridges area to the Waterport Dam, shall be continued to maintain the rural character of this area and protect shoreline and surface water resources. Land uses around Lake Alice shoreline shall also be maintained, with little change expected aside from improvements for public access.

Town of Kendall

The WRA in the Town of Kendall is developed with numerous single-family residential dwellings located within residential communities along the Lake Ontario shoreline, north of Lake Ontario State Parkway. East of Eagle Creek, large areas of open space and agricultural land separate the concentrated residential areas along the Lake Ontario shoreline from the parkway. Bald Eagle Marina is the only commercial water-dependent use in this portion of the WRA; the Cottages at Troutburg includes a water-dependent recreation feature that is comprised of beachfront access for non-motorized vessels and a fishing pier. Current land uses shall be continued in this area, with minor changes in a few locations to accommodate additional residential use along the shoreline (in-fill development) and the continued buildout of the Troutburg Cottages development. Continued improvements are also proposed on the marina property. Efforts are needed to improve public access to the Lake Ontario shoreline (both physical and visual), as well as Eagle Creek, which is precluded by Lake Ontario State Parkway. Land uses along the portion of Sandy Creek, which extends through the southeastern portion of

the Town, will continue, maintaining the low density, rural character of this area. Improvements for shoreline fishing access along Sandy Creek are the only changes proposed.

4.2 Proposed Water Uses/Harbor Management

As noted in Section 2.6 in the Inventory and Analysis, vessel use in and along the Kendall-Yates-Carlton-Lyndonville WRA occurs on Lake Ontario, Oak Orchard Creek, Lake Alice, and the lower reaches of Johnson and Bald Eagle Creeks. Vessel use is limited to small pleasure craft, which are used extensively for recreational boating, sailing and fishing, as well as charter fishing. Access to local surface waters is provided by public and private marinas, boat launches and private yacht clubs. Charter fishing vessels operate out of Point Breeze, where numerous public and private marinas are located, and Bald Eagle Marina on Lake Ontario, There are numerous private docking facilities found along the shoreline of many of the creeks, in particular Oak Orchard and Johnson Creeks, that are associated with private residential properties, enabling residents to utilize the creeks for recreational boating and fishing. There are no public or private docks or boat launch facilities located directly along the Lake Ontario shoreline due to hydrologic conditions and extreme weather events. Navigation along the Lake Ontario nearshore areas along the shoreline is restricted by shallow water depth and rocky conditions. Navigation charts for the area show numerous rocks, some of which are only visible during periods of seasonal low water levels, as well as areas with ruins and other obstructions. The installation of docks, pilings, decks and boathouses along the creeks and on Lake Ontario, is regulated by the Army Corps. of Engineers and requires the issuance of a Regional Permit, pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Structures that do not meet the conditions of the Regional Permit can be considered for approval under an Individual Permit. NYSDEC approval may also be required depending on the circumstances.

Lake Alice, also known as the Waterport Reservoir, is a 335-acre impoundment along the upper reach of Oak Orchard Creek. This reservoir has over 10 miles of shoreline and is a popular location for recreational fishing, boating and water sports. The creek was dammed around 1920 for hydroelectric power generation. The spillway below the dam has a vertical drop of about 65 feet and is separated from Waterport Falls, the rock cascade where water flow from

the reservoir continues to naturally reach Oak Orchard Creek. Navigation on the Lake Alice reservoir is regulated under Section 45-aaaaa of the New York State Navigation Law. This section of the law requires that vessels on Lake Alice operate in a careful and prudent manner and not unreasonably interfere with or endanger any other vessel of person. It further restricts vessel operating speeds.

The mouth of Oak Orchard Creek has been developed as a federal navigation channel. The entrance channel is comprised of two 1,000-foot long rock jetties that extend along the east and west sides of the channel and a 550-foot long concrete breakwater that lies perpendicular to, and seaward of the jetties, creating a harbor of refuge. Navigational aids are located around the entrance, including a flashing light at the end of each jetty and three lights located on the breakwater. The channel was completed in 1975 by the Army Corps. of Engineers. The entrance channel to Bald Eagle Marina, in the Town of Kendall, is aided by two private lights that are located on each side of the channel.

The Oak Orchard Creek navigation channel is maintained at a depth of 4 feet in the vicinity of the east/west oriented breakwater; landward of this structure a 6-foot deep channel extend into the mouth of the creek where it terminates at a 5 ½-foot boat basin. This channel was last dredged in 2014 and is proposed to be dredged again in 2021 under the State's Resiliency an Economic Development Initiative (along with the mouth of Johnson Creek). Dredging is an issue that prompted the creation of the Regional Dredging Management Planning Council to advocate for necessary dredging in areas not designated by the federal government. This included Oak Orchard Creek, outside of the federal navigation channel, as well as at the mouths of Johnson and Bald Eagle Creeks, to ensure continued navigable access for marinas and residential docks.

Water uses are important to the vitality, as well as the economy, of the Kendall-Yates-Carlton-Lyndonville communities. Management of surface water uses in Oak Orchard Creek and on Lake Alice is necessary to ensure proper control of vessel use in these areas, and to protect important natural resources. Formal water use management plans are recommended for these areas.

4.3 Proposed Projects and Studies

There are several projects proposed along the Kendall-Yates-Carlton-Lyndonville waterfront to improve opportunities for public access and recreation, advance economic development for recreational tourism, improve infrastructure and to address water quality, habitat protection, shoreline erosion and other local concerns. As noted in the previous discussion, much of the shoreline is developed with private residential uses, limiting the potential for increasing the amount of public recreational space along the waterfront for general public enjoyment (particularly for residents living in inland areas). However, improvements to existing State and Town/Village-owned lands can increase recreational and public access opportunities. Projects proposed along the Kendall-Yates-Carlton-Lyndonville waterfront are outlined below. It is important to note that any action that is undertaken to implement the Kendall-Yates-Carlton-Lyndonville LWRP must be consistent with respective Town and Village zoning provisions and would be subject to review under the New York State Environmental Quality Review Act.

It is also important for the individual communities to maintain and strengthen their relationship with the New York State Department of Transportation (NYSDOT), New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) and the New York State Department of Environmental Conservation (NYSDEC), as well as Orleans County. Maintaining and strengthening these relationships is important for the achievement and coordination of proposed projects throughout the WRA, for boosting recreation and tourism and to protect natural resources.

Public Access, Recreation and Wayfinding

- *Designation of the Lake Ontario Shoreline as a Scenic Area of Statewide Significance* - New York State recognizes that a major component of community character is scenic resources, including special landscape features and views that contribute to visual quality and public enjoyment. The shoreline offers spectacular views of the Lake Ontario. This area is also part of the New York Great Lakes Seaway Trail, which extends along Lake Road. The Towns of Kendall, Yates and Carlton and the Village

Lyndonville will work with the NYSDOS to initiate an assessment of the lakeshore area within the WRA to determine if this area would qualify for designation as a Scenic Area of Statewide Significance (SASS). Such designation protects scenic landscapes through review of projects that require State or federal actions, including direct actions, permits or funding. The Towns could work with the Town of Somerset, which has an adopted LWRP, to lend greater value and seek designation for a greater extent of the lakeshore.

Estimated Project Cost:	There would be no costs incurred by the KYCL LWRP communities for this project
Potential Funding Sources:	NYSDOS, NYSDEC
Potential Project Partners:	NYSDOS, NYSDEC, Towns of Yates, Carlton and Kendall, Orleans County
Potential Approvals/Permits:	None
Estimated Timeframe:	2 to 5 years

- *Submerged Marine Structures*

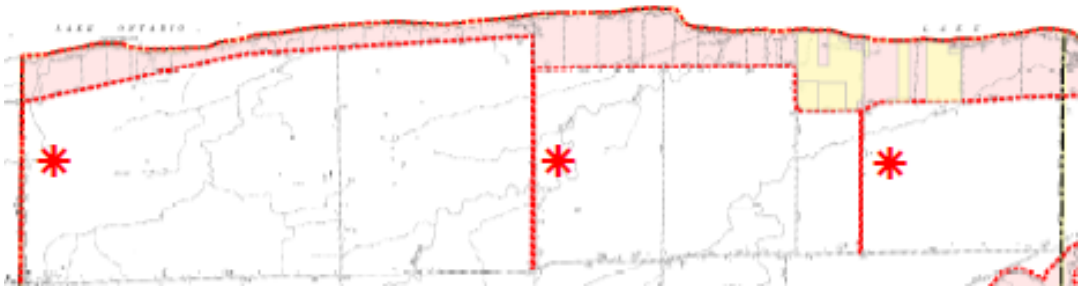
  There are numerous offshore submerged structures in Lake Ontario in Niagara and Orleans County. These underwater structures (such as piers, old docks, shipwrecks, etc.) present safety hazards to recreational boaters. This project involves the installation of temporary safety markers that will serve as a clear and concise visual warning to protect boaters in the area. These markers would be installed in a manner such that they are not easily removed, hidden or otherwise obstructed or damaged. This project will provide an increased level of confidence for boaters to safely navigate lake waters without fear of accidents, damage or injury.

Estimated Total Project Cost:	$50,000
Potential Funding Sources:	NYS REDI Funding
Potential Project Partners:	NYSDOS, NYSDEC, Orleans County
Potential Approvals/Permits:	Does not require permits but should be coordinated with the US Coast Guard
Estimated Timeframe:	1 to 2 years

Town of Yates

- *Multi-Use Trail, Corridor Access Connections and Wayfinding Systems*

  Multi-use trails and pathways, as modes of transportation and recreation in rural communities, can offer huge benefits in health, well-being, local engagement, and economic vitality. Yates will engage consultant assistance to determine appropriate locations for trail development within right of way on local roadway in the Town and what type of road enhancement would best encourage more trail/sidewalk usage. Focus has been placed on north-south connections between State Route 18 (the New York Great Lakes Seaway Trail) and the Lake Ontario shoreline, where Yates Town Park and three State Parks are located within a 30-mile radius. In particular, access corridor connections are proposed along County Line Road between State Route 18 and West Lakeshore Road, and Morrison Road, between State Route 18 and Yates Town Park. A connection between the shoreline at Shadigee and Village of Lyndonville, along North Lyndonville Road, is also a priority. Yates is a town with an active summer community, a growing Amish and Mennonite community, and beautiful rural landscape. Local birding activity has also increased in the past several years.



Other focus areas that are being proposed for study include:

- East/West Multi-Use Trail Connections
  There is already substantial bike and pedestrian traffic on Lakeshore Road. Enhanced spaces would encourage more use and increase safety. It would also encourage village and town residents to enjoy the lake region of the town to utilize the town park and continue to Lakeside Beach park. Plans would encompass the entire length of the town from east to west along Lakeshore Road.
- Other Trailhead Locations
  Yates Town Park: foot of North Lyndonville Road – Designated areas where people can park and then utilize the trails or stop and gather while utilizing the trails.

- Improved lighting and wayfinding signage throughout the WRA, as well as for the trails, to help visitors to the area navigate the shoreline and locate prominent features.

Estimated Project Cost: $50,000 (for planning study) and $5,600,000 for build out
Potential Funding Sources: Federal Transportation Act funding programs; NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, NYSDOT, Orleans County, Town of Yates, Village of Lyndonville
Potential Approvals/Permits: To be determined as part of study
Estimated Timeframe: 1 to 2 years

- *Shadigee Waterfront Improvement Project*

The Town of Yates owns the property at the terminus of North Lyndonville Road, which is the site of the former Yates Pier. This property has the potential to be improved as a destination for public use and waterfront access. Such improvements could offer related business and economic development opportunities for the Shadigee lakeshore area of the Town. Furthermore, the designation of this area as a safe harbor and installation of a pier, jetty, temporary boat dockage, and/or a boat launch, could increase boating, sportfishing and leisure activity. Acquisition of additional 12 acres of land for this project, at the northwest corner of North Lyndonville Road and West Lakeshore Road, would help drive economic development to one of the few public lakeshore areas in the Town. The addition of a restaurant/concession, enhanced landscaping, additional benches and waste receptacles, electrical service, improved parking and restroom facilities, are all envisioned as a potential means of returning this area of the Town to a destination of activity and revenue generator. The location of this site at the foot of the North Lyndonville Road will ensure ease of use and enjoyment by Town residents, as well as tourists and boaters from Western New York and beyond. To enable this project, a feasibility planning study must first be undertaken to evaluate the potential for site reuse, land acquisition and the other aspects of this projects, as noted above.

Estimated Project Cost: $30,000 (for planning study) and $3.250,000 for build out

Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program; Great Lakes Restoration Initiative
Potential Project Partners: NYSDOS, NYSDEC, NYSOPRHP, Orleans County
Potential Approvals/Permits: To be determined as part of study
Estimated Timeframe: 1 to 2 years

- *Yates Town Park and Park Expansion Project*

Yates Town Park is a large property, located along the Lake Ontario shoreline, that has the potential for new and expanded public use for recreation and public access. This project, which would include the preparation of a master plan for the area, further seeks to enhance the environmental resiliency of the park and expand natural and nature-based features. Improvements to this property would provide significant business and economic development opportunities. Designation of this area as a safe harbor, by way of the addition of a pier, jetties, and a boat launch, would increase boating, sporting and leisure activity safety. Costs for park improvements, including roadway and parking lot upgrades, erosion control during construction, bank stabilization and protection along the lakefront, and park amenities (pavilion, nature trail, kayak launch and playground) are estimated at $2,531,000. Acquisition of 100 acres of contiguous New York State Electric and Gas Company (NYSEG) land would also enable the development of additional nature trails, a champion level frisbee disc golf course, and direct connection with the shoe tree property (see below), which is also recommended for Town acquisition. Furthermore, the addition of electrical service and public restroom facilities would allow for the construction of a performance venue/band shell for Town celebrations. Development and expansion of the Town Park would significantly increase and improve use for one of the few public lakeshore areas in the Town of Yates. Additional project ideas include entertainment programming, e.g. “Shake on the Lake”; enhanced shoreline access to Lake Ontario; transient boat dockage, and small concession opportunities.

Estimated Total Project Cost: $5,372,000
Potential Funding Sources: NYS REDI Funding, NYS Environmental Protection Fund; NYS Legislative Grant Program; Great Lakes Restoration Fund; Great Lakes Protection Fund

Potential Project Partners: NYSDOS, NYSDEC, NYSOPRHP, Orleans County
Potential Approvals/Permits: Multi-jurisdictional permit review is required
Estimated Timeframe: 2 to 5 years

- *Shoe Tree Acquisition and Trail Head Park Development*

The Shoe Tree project is located at the intersection of Morrison Road and Lakeshore Road. This location has organically become a gathering place for community. The Town of Yates plans to purchase this property and enhance its use for public benefit. Its proximity to the NYSEG land that the Town is also planning to purchase, and Yates Town Park, creates options for its future use that may not be currently apparent. As the Town of Yates has only two public parks along the Lake Ontario Shoreline, the acquisition of this property and its potential for use in conjunction with Yates Town Park and other potential acquired lands provides the opportunity to create a significant destination in the Town for public recreation and tourism.

Estimated Total Project Cost: $50,000
Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, NYSOPRHP, Orleans County
Potential Approvals/Permits: To be determined as a part of project planning
Estimated Timeframe: 2 to 5 years

<u>Village of Lyndonville</u>

- *Patterson Pond/Johnson Creek Recreational Use Project*

The Village-owned lands around Patterson Pond and the publicly owned foreshore along the Johnson Creek corridor in the Village of Lyndonville have the potential for improvement to increase public use and recreational enjoyment of these areas. The parkland behind Village Hall has direct access to the pond and

the potential for improvement as a destination park in the community. It is proposed to be improved with a small pier and a cartop launch area for kayaks and canoes. It could also accommodate a pavilion and picnic area and band shelter to enhance its use.

Additionally, the dam at Patterson Pond needs repair and the pond needs to be dredged (listed further as separate projects). The overall goal is to fully restore and utilize the Patterson Pond area for public enjoyment as a local park, fishing area and tourist attraction.

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The publicly owned lands along Johnson Creek behind the Village Department of Public Works facility also have potential for increased public use for shoreline fishing, picnicking and other forms of passive recreation. The preparation of a master plan for the future use and enjoyment of the Patterson Pond/Johnson Creek areas will coordinate planning for several parcels of land owned by the Village and may involve the purchase of additional parcels or rights of way to enable full usage. Working with Orleans County and the State, future use opportunities and funding sources will be identified.
Specifically, this project includes:

- Further develop the Village-owned green space east of North Main Street (behind the Village Department of Public Works) to include picnic areas, a pavilion and other amenities for public gathering.
- The Village of Lyndonville has shown its commitment to summer music concerts. On the Village-owned land on the south side of Patterson Pond, build a concert pavilion (bandshell) at bottom of sloped grassy area for summer concerts. Build a walkway to this pavilion from the municipal parking area and Main Street. Consider porous pavement or other sustainable practices to reduce runoff into the pond and creek.
- Create areas for picnic tables and benches in the area south of Patterson Pond. Create a space that does not require excessive maintenance by using native plants and grasses with

enough area that would be mowed, but also with natural buffers to the pond to prevent runoff and attract birds.
- Look for opportunities to use low cost sustainable practices that will reduce maintenance.
- Utilize proximity to Secondary School on the north side of Patterson Pond and identify opportunities for educational experiences for student, including pond and stream health, importance of native plants, migratory bird stopover location and sustainable practices.
- Build a wooden or aluminum dock on the south or east side of Patterson Pond for shoreline fishing
- Evaluate the establishment of a cartop kayak and canoe launch site behind Village Hall. Build a porous pavement walkway from the municipal parking area to this site.
- Provide electrical service and lighting to the pavilion. Consider energy usage, existing dark skies and seasonal bird migration when selecting lighting type and location.
- Improve the north and south shoreline areas below Patterson Pond dam to improve public fishing access.
- Improve the small Village park located near the dam and the library for Village events and gatherings (add seating, fix sidewalks, etc.)
- Purchase the land at the bottom of the dam, on the north side, from the School District, for improved public fishing access.
- Develop a multi-use trail along the shoreline of Johnson Creek; consider use of the former Hojack rail line as a bridge for the trail across the creek.

Estimated Project Cost:	$50,000 (for planning study) (additional costs for construction)
Potential Funding Sources:	NYS Environmental Protection Fund; Great Lakes Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, Orleans County, Town of Yates
Potential Approvals/Permits:	Multi-jurisdiction permit review will be required
Estimated Timeframe:	1 to 2 years

Town of Carlton

- *Publicly Owned Docks and Boat Launches in Orleans County*
  Sport Fishing on Lake Ontario is a significant industry, generating tourism-generated revenue to the local economy. Maintaining marine facilities (docks, boat launches, anchorage areas) is an important element to sustain or increase local revenue and recreational boating activity. This project proposes mitigation measures at New York State and Orleans County marine

facilities through the replacement of fixed elevation docks with floating docks and slips, inclusive of anchorage and posts to permit only vertical dock movement, and modification and upgrades to impaired boat launches to increase their resiliency. This project will protect and maintain economic activity, including support of recreational boating access, local restaurants and marine-related businesses, and sustain tourism in Orleans County.

Estimated Project Cost:	$876,000
Potential Funding Sources:	NYS REDI Program Funding; NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, Orleans County, Town of Carlton
Potential Approvals/Permits:	Multi-jurisdiction permit review will be required.
Estimated Timeframe:	2 to 5 years

- *Lakeside Beach State Park:*

Lakeside Beach State Park is a large facility that is underutilized and has the potential to draw a greater number of users throughout the year. This park is the only State park in the region that does not offer opportunities for public swimming. The shoreline along Lake Ontario consists of steep bluffs and rocky beach, which is difficult to access and not conducive for public bathing. It is recommended that the State evaluate the potential to install a public swimming pool during the summer season. This amenity would enhance public recreation in the park. Furthermore, the State should evaluate reestablishing the public boat launch that existed along Johnson Creek. Improvements of this nature will provide additional opportunities for increasing park usage and would provide an amenity that does not exist along Johnson Creek in the WRA. The partnering LWRP communities should work with Orleans County and the State to evaluate the potential to undertake these improvements.

Estimated Project Cost:	There would be no costs incurred by the KYCL LWRP communities for this project
Potential Funding Sources:	NYS Environmental Protection Fund; Great Lakes Restoration Initiative
Potential Project Partners:	NYSDOS, NYSDEC, Orleans County, Town of Carlton

Potential Approvals/Permits: To be determined as part of project planning
Estimated Timeframe: 2 to 5 years

- *Orleans County Marine Park Enhancements*

The Orleans County Marine Park has the potential and sufficient area for improvement with an amphitheater to enhance public use and enjoyment of the park. This would involve improvement of the existing hillside with grading and landscaping and installation of stone platforms for seating.

Estimated Project Cost: $75,000-100,000
Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, NYSOPRHP, Town of Carlton
Potential Approvals/Permits: To be determined as part of project design
Estimated Timeframe: 2 to 5 years

- *Pedestrian Bridge Construction and Improved Fishing Access in the Three Bridges area*

The Three Bridges area in the Town of Carlton is located at the confluence of Marsh Creek with Oak Orchard Creek. This is a popular location for recreation boating and fishing that is supported by a small number of marinas in the area. Improvements are needed in this area to improve tourism and fishing access to the creek. The historic bridge that once carried Oak Orchard Road over Oak Orchard Creek (which dated back to the late 1800's) was removed a number of years ago. The goal of this project is to build a bridge for pedestrian access that would also offer opportunities for shoreline fishing, which are lacking in this area. The recreation of an historically accurate covered bridge and walkway would increase visitor traffic and bring additional investment to this area. The new bridge structure

could utilize the existing abutments that remain from the former bridge and must ensure sufficient clearance for taller vessels that move along the creek. Fishing access could be established from the bridge and/or surrounding area by way of a platform or side extensions where anglers could drop a line. The area around the bridge abutments would be landscaped to enhance the visual setting and possibly provide an area for boating access, particularly for non-motorized vessels which is also needed. Location(s) for potential boating and fishing access, whether through the development of a launch area and/or a separate fishing dock, should be identified and developed to improve overall public use and enjoyment of this area. This project is a top priority for the Town of Carlton as it has significant potential to increase tourism, recreation fishing and public access to the creek.

Estimated Project Cost: $500,000
Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, Orleans County, Town of Carlton
Potential Approvals/Permits: Multi-jurisdiction permit review will be required.
Estimated Timeframe: 5 years

- *Lake Alice Waterfront and Fishing Access – Hanlon Road Project*

The Lake Alice (Waterport) Reservoir is a popular and well utilized area for recreational fishing and water sports. There is a lack of public access sites to the lake for boating and fishing access. Fishing access could be provided on the west side of the abutment for the former bridge that carried Hanlon Road over Otter Creek. The abutment structure could be enlarged and ultimately upgraded to a covered bridge for pedestrian use only. This would create a destination for local fishing and public access to the creek. A small informal parking area exists at the site that could be improved to accommodate a few more cars. This project would enhance the local economy and tourism in the area.

Estimated Project Cost: $375,000
Potential Funding Sources: NYS Environmental Protection Fund; Great Lakes Restoration Fund

Potential Project Partners: NYSDOS, NYSDEC, Orleans County, Town of Carlton
Potential Approvals/Permits: To be determined as part of project planning
Estimated Timeframe: 2 to 5 years

- *Kuckville Boat Launch Ramp*
  The former boat launch site along Johnson Creek in Kuckville hamlet should be restored to provide public recreational access to this waterway. Restoration of this area as a cartop boat launch for small, non-motorized vessels would enhance recreational use and tourism.

Estimated Project Cost: $50,000
Potential Funding Sources: NYS Environmental Protection Fund; Great Lakes Restoration Initiative; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, Orleans County, Town of Carlton
Potential Approvals/Permits: To be determined as part of project planning
Estimated Timeframe: 2 to 5 years
Responsible Entity: New York State

- *Public Access Improvement at Waterport Dam*
  The area below Waterport Dam is heavily used for recreational fishing, particularly at the height of salmon season. Although the NYSDEC operates a parking area at this location, overall control of the use of this area is warranted due to the high volume of fishermen that utilize the site. Suggested improvements include formalized access paths, signage, temporary restrooms, and a fish cleaning station.

Estimated Project Cost: $50,000-75,000
Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, NYSOPRHP, Orleans County, Town of Carlton

Potential Approvals/Permits: To be determined as part of project planning
Estimated Timeframe: 1 to 2 years

- *Lake Ontario State Parkway Pull-off Areas*
  Lake Ontario State Parkway extends through the Towns of Carlton and Kendall, typically running parallel to Lake Ontario. This parkway prohibits public access to the lake in many locations, particularly for scenic viewing. This roadway is a segment of the New York Great Lakes Seaway Trail and the State should take advantage of its location and designation to provide greater benefit to the public. Locations for pull-off to provide scenic overlooks should be identified and such access provided to enhance passive recreation, public enjoyment and tourism in this area of the WRA. This effort should be evaluated as part of the ongoing study for future improvement of this parkway.

  Estimated Project Cost: There would be no costs incurred by the KYCL LWRP communities for this project
  Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
  Potential Project Partners: NYSDOS, NYSDEC, NYSOPRHP, Orleans County, Towns of Carlton and Kendall
  Potential Approvals/Permits: To be determined as part of project design
  Estimated Timeframe: 2 to 5 years

<u>Town of Kendall</u>

- *Town Parks Development*
  Create a variety of Town Parks that utilize the unique character of the WRA and provide recreational and educational opportunities to both Kendall residents and visitors to the Town. These parks would include waterfront parks, perhaps at the end of Center Road where the original Town Park existed that could incorporate picnic areas and a splash pad. The ends of Peter Smith Road and Thompson Drive are potential sites for small boat launches. Creating scenic vista parks in the WRA areas on Kendall and County Line Roads will offer views of Lake Ontario and could incorporate environmental and historical displays, as well as basic rest area services for hikers/bikers. Finally, developing a network of linear parks that provide walking and biking opportunities along the Lake Ontario State Parkway right-of-way

aprons, with connections to the scenic vista parks. These pathways would also be designed to connect to similar pathways developed in adjacent communities. Initial project steps include:

- Obtain grant funding for a feasibility study.
- Execute the study and develop proposal for the three types of parks (waterfront, scenic vista and linear).
- Obtain grant funding to execute the project.
- Hire engineering/community development teams to provide designs and content.

Estimated Project Cost:	$30,000 (for planning study)
Potential Funding Sources:	NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, NYSDOT
Potential Approvals/Permits:	To be determined as part of project design
Estimated Timeframe:	1 to 2 years

- *Cooperative Programs with Bald Eagle Marina*

This project would involve investigation of the establishment of a cooperative effort with Bald Eagle Marina to allow the development of waterfront activities for the general public, including development of conceptual plans and organizational agreements. These may include community boating (sail and power) and fishing programs operated through the Kendall Recreational Office. This project would require participation by both the privately held Marina and the Town. The Marina would allow access to their property as a base for the Town run programs. The marina has about 300 feet of unutilized beach that could be accessed by a pedestrian bridge. Initial project steps include:

- Study how similar projects have been undertaken in other communities.
- Establish a cooperative agreement between the Town and Bald Eagle Marina.
- Survey public on interest in proposed programs.

Estimated Project Cost:	$25,000-30,000

Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, NYSOPRHP, Orleans County
Potential Approvals/Permits: To be determined as part of project planning
Estimated Timeframe: 2 to 5 years

- *Cooperative Programs with The Cottages at Troutburg*
Investigate the potential development of a cooperative programs between the Cottages at Troutburg and the Town of Kendall that provide benefits to both entities, including development of conceptual plans and organizational agreements. These may include public access to the swimming pool and/or hiking/bike paths connecting through the property which connect to the network of linear parks. Initial project steps include:

  - Study how similar projects have been undertaken in other communities.
  - Establish a cooperative agreement between the Town and The Cottages at Troutburg.
  - Survey public on interest in proposed programs.

Estimated Project Cost: $25,000-30,000
Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, NYSOPRHP, Orleans County
Potential Approvals/Permits: To be determined as part of project planning
Estimated Timeframe: 5 years

- *Bald Eagle Creek Fishing Access*
Create recreational access to Bald Eagle Creek from Lake Ontario, upstream to the southern WRA boundary, where opportunities for kayaks/canoe access, shoreline fishing access and hiking exist. This project is impacted by future decision-making for improvements to the Lake Ontario State Parkway. Should the Parkway remain for four-lane travel, access to Eagle Creek would be limited to small vessels traveling upstream from the Marina area.

However, if the Parkway were reduced to two lanes, a park area with hiking trails and fishing access could be created. Initial project steps include:

- Maintain close contact with the Lake Ontario State Parkway consultant team.
- Obtain grants to fund a feasibility study.
- Obtain grants to fund project execution.

Estimated Project Cost: $150,000 (assumes downgrade of parkway)
Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOT, NYSDEC, NYSOPRHP, Town of Kendall
Potential Approvals/Permits: Multi-jurisdiction permit review will be required
Estimated Timeframe: 2 to 5 years
Responsible Entity: New York State, Town of Kendall

- *Sandy Creek Fishing Access*

The objective of this project is to increase and improve shoreline fishing access along the portions of Sandy Creek in the Town of Kendall. This will involve working with the NYSDEC to evaluate permit requirements and private property owners to secure permission to allow public fishing along a narrow corridor on each bank of Sandy Creek. Suggested locations for access include County Line at Creek Road, Norway Road and Carton Road.

Initial project steps include:

- Discuss proposed project and acquisition of fishing rights with the NYSDEC.
- Obtain funding to undertake feasibility study.
- Obtain funding to execute project in accordance with NYSDEC requirements.

Estimated Project Cost: $30,000
Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, NYSOPRHP, Town of Kendall

Potential Approvals/Permits: Multi-jurisdiction permit review will be required
Estimated Timeframe: 2 to 5 years

Environmental Protection

- *Shoreline Flooding and Erosion*

This project aims to drive a paradigm shift in how Kendall, Carlton and Yates manage their waterfront and ensure that the entire shoreline and infrastructure is capable of surviving high-water events like those experienced in 2017 and 2019. The project will establish an inter- community wide citizens committee to coordinate with the recently announced REDI program and any future state/federal efforts. This committee would also engage with the Lake Ontario State Parkway Study group.

Initial project steps include:

- Determine optimum format for committee, e.g., ad hoc; standing.
- Establish the committee including town officials (e.g., supervisor; town board; planning; code; highway); waterfront business owners, tourism and recreation representatives and waterfront residential property owners.
- Establish the necessary links at county, state and federal levels.
- Identify critical issues and opportunities.
- Identify all possible funding sources.
- Hire support necessary to execute identified projects.

Estimated Project Cost: $20,000
Potential Funding Sources: NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, NYSDOT, Orleans County
Potential Approvals/Permits: None
Estimated Timeframe: 1 to 2 years

- *Total Maximum Daily Load Evaluation for Lake Ontario*
  Section 303(d) of the Federal Clean Water Act requires States to identify impaired waters wherein specific designated or appropriate uses are not supported, requiring the identification of a Total Maximum Daily Load (TMDL) or other restoration strategy to reduce the input of the specific pollutant(s) that restricts waterbody uses in order to restore and protect such uses. The TMDL target is a numeric endpoint specified to represent the level of acceptable water quality that is to be achieved by implementing this TMDL strategy. The 2016 Section 303(d) List of Impaired Waters identifies Lake Ontario surface waters in the Kendall-Yates-Carlton-Lyndonville WRA that require some level of attention to identify water quality impairments and strategies to achieve water quality standards.

  A TMDL determination or other appropriate strategy is required for Lake Ontario due to fish consumption advisories related to the known presence of contaminated sediments containing dioxin, mirex and PCBs. The western portion of Lake Ontario is identified as a waterbody for which the preparation of a TMDL may be deferred pending further verification of suspected impairments and the cause, pollutant or source of water quality problems. As noted in the 2016 Section 303(d) List, the western portion of Lake Ontario requires further study for pesticides and priority organics; Lake Ontario for phosphorus associated with algal blooms (the suspected source is agricultural runoff). Aquatic life support and fishing are impaired by pollutants that need to be verified so that an appropriate remedial strategy can be devised. To address these water quality issues in the Kendall-Yates-Carlton-Lyndonville WRA, coordination with the NYSDEC is needed to initiate appropriate action. Water quality issues, particularly the increasing prevalence of algal blooms and contaminants that may impact recreational fishing, must be addressed to ensure the long-term viability and enjoyment of surface waters in the Town.

Estimated Project Cost:	There would be no costs incurred by the KYCL LWRP communities for this project
Potential Funding Sources:	NYS Environmental Protection Fund, NYSDEC
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP
Potential Approvals/Permits:	To be determined as part of project review
Estimated Timeframe:	5 years

- *Evaluation Study of Erosion Risk and Protection along Lake Ontario*
  There is a need for pro-active planning to address shoreline flooding and erosion along the Lake Ontario shoreline. The Town of Kendal, Yates and Carlton must collectively work with the NYSDEC to initiate a study of the erosion along the Lake Ontario shoreline in all three

communities within the WRA to determine the potential risk for future landslide and the potential rate of bluff erosion, and possible solutions and mitigations. This study should also include an evaluation of existing erosion protection structures to determine their existing condition, maintenance needs and effectiveness for erosion protection during severe storms and lake level rise events. It is recommended that the Towns collaborate with the County as this could offer greater value to the public and the State.

Estimated Project Cost:	There would be no costs incurred by the KYCL LWRP communities for this project
Potential Funding Sources:	NYS Environmental Protection Fund, Great Lakes Restoration Initiative; NYSDEC
Potential Project Partners:	NYSDOS, NYSDEC, Orleans County, KYCL LWRP communities
Potential Approvals/Permits:	To be determined as part of project planning
Estimated Timeframe:	2 to 5 years

- *Environmental Protection Workshops –*
  In an effort to implement some of the recommendations of the Kendall-Yates-Carlton-Lyndonville LWRP, public education is useful. To carry out this effort, the communities will reach out to local environmental groups and agencies to host a series of public workshops or forums on relevant topics such as water quality and non-point source pollution, septic system care and maintenance, invasive species management, habitat protection, shoreline erosion, climate change and other such topics.

Estimated Project Cost:	$15,000
Potential Funding Sources:	NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, KYCL LWRP communities
Potential Approvals/Permits:	None
Estimated Timeframe:	1 to 2 years

Village of Lyndonville

- *Patterson Pond Dredging*

Patterson Pond needs to be dredged to restore a sustainable water level that is critical for habitat resiliency and wildlife survival. Sediment and debris carried in stormwater runoff and from erosion has built up to the point where it is visible in certain areas of the pond. This project includes sampling of bottom sediments to determine the presence of hazardous waste that was carried downstream from the source. Part of this effort includes an evaluation of proper dredge spoil disposal. Restoration of this pond is an important element associated with the habitat restoration efforts for the pond and Johnson Creek, restoration of the dam, and improvements to municipal lands around the pond for recreational use.

Estimated Project Cost:	$1.5 million
Potential Funding Sources:	NYS Environmental Protection Fund; NYS Legislative Grant Program; Superfund Cleanup Fund; Great Lakes Restoration Initiative
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, Orleans County, Town of Yates
Potential Approvals/Permits:	Multi-jurisdiction permit review will be required
Estimated Timeframe:	5 years

- *Patterson Pond and Johnson Creek stream corridor restoration for wildlife habitat, erosion prevention, wildlife education opportunities, and public and shoreline fishing access*

The overall restoration of these areas will include improvements to the shoreline of the pond and creek to mitigate erosion and address other environmental issues, removal of invasive species, using native vegetation and replacement of the hard edge, where necessary. Restore aquatic plant vegetation, improve landscape to prevent erosion, plant native vegetation including indigenous

wildflowers, shrubs, grasses and, if needed, install rock to prevent shoreline erosion. Create access to the pond and creek for shoreline fishing that does not cause sedimentation or erosion. The new riparian plantings will provide suitable wildlife habitat for migratory birds and pollinators, and will help improve water quality by limiting erosion, maintaining cooler water temperatures, and helping to discourage Canada geese from utilizing the area. This project also includes:

1. Purchase of Patterson Pond and 10 feet of northern shoreline from the School district to enable Village greater flexibility for environmental and recreational improvements.
2. Evaluate the shoreline to determine if spawning areas for fish can be improved. This may include a permanent or removable fish ladder to allow access from Johnson Creek to Patterson Pond (fish in Johnson Creek fish include Brown Trout, Chinook Salmon, Rainbow Trout, Coho Salmon).
3. Engage with High School science teachers to help plan aspects of the project and to do stream testing necessary to develop final plans.
4. Research and discuss the creation of additional fish habitat for areas to the south of Patterson Pond with the NYSDEC.
5. Utilize students to assist with project implementation.
6. Assess the need for dredging of Patterson Pond, including a location to place spoil sediments, to increase depths and improve habitat for fish and wildlife (see below).
7. Purchase an aeration system to provide better plant and fish habitat quality in the pond.
8. Consider possible seasonal availability of waste and recycling receptacles and benches to prevent litter and provide dry seating in creek area.
9. Evaluate the reuse of the Crosby-Whipple property on the southside of Johnson Creek, at Main Street, for public benefit and potential acquisition.
10. Improved water quality of the pond through sediment removal, native vegetation buffer installation, stormwater filtration, thermal pollination reduction, bank stabilization, soil erosion control, aeration and improved surface water infiltration.
    - Installation of nesting structures. A variety of species will benefit, including fish, macroinvertebrates, amphibians, reptiles, small mammals, beneficial insects, and birds. The south shore of Lake Ontario provides critically important stopover areas for foraging and resting migratory birds.
    - Increased Educational Opportunities will be made possible by not only the installation of interpretive signs for general visitors, but the restoration area will be accessible to school and community groups as a destination area for field trips, school/research projects or volunteer opportunities.

Estimated Project Cost:	TBD
Potential Funding Sources:	NYS Environmental Protection Fund; NYS Legislative Grant Program; Great Lakes Restoration Initiative
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, Cornell Cooperative Extension, Orleans County Soil and Water Conservation District, Lyndonville Central School District
Potential Approvals/Permits:	Multi-jurisdiction permit review will be required
Estimated Timeframe:	2 to 5 years

Town of Carlton

- *Green Harbor Campground Marina Flood Control Feasibility Study*

  Green Harbor is a private campground facility that is located directly along the Lake Ontario shoreline. The camp experiences significant flooding when lake levels rise in combination with severe weather events. This problem is impacting the ability of the campground to operate and has resulted in high costs for recovery efforts. Intervention is needed to protect this facility and help prevent future flood damage by way of a feasibility study and construction mitigation.

Estimated Project Cost:	$1,447,000
Potential Funding Sources:	NYS REDI funding; NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, Orleans County
Potential Approvals/Permits:	Multi-jurisdiction permit review will be required
Estimated Timeframe:	2 to 5 years

Public Infrastructure Improvements

Village of Lyndonville

- *Patterson Pond Dam Restoration and Repair*
  Initial funding has been secured to initiate repairs to the dam. Timing is good for the Village, together with the Town of Yates, to build upon these improvement and maintenance activities. The funding provided to date highlights the priority that the residents place for improvements to this area. Some next steps for continued action in this area include:

  - Review engineering analysis of the bridge over Johnson Creek and dam to assess structural needs and possible alterations and changes, in addition to repairs that would enhance safety, as well as environmental impacts.
  - Evaluate potential for installation of a fish ladder to enable salmon and other species to move between Johnson Creek and Patterson Pond.
  - Repair the deteriorating stone wall near the dam, as well as deteriorating bridge walls and the pedestrian walkway across the bridge.
  - Consider the possibility of constructing a small hydro-generating facility that could be designed and implemented in conjunction with the secondary schools.

Estimated Project Cost:	TBD
Potential Funding Sources:	NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, Orleans County, Town of Yates, Lyndonville Central School District
Potential Approvals/Permits:	Multi-jurisdiction permit review will be required
Estimated Timeframe:	2 to 5 years

Town of Carlton

- *Regional Dredging Management Planning Council Program*
  There are several harbors or creek mouths in the region that need dredging to maintain navigation through these areas. Eight Counties with frontage along Lake Ontario and St. Lawrence River are collaborating to advocate for and oversee numerous projects that are being proposed for the area; they include Cayuga, Jefferson, Monroe, Niagara Orleans, Oswego, St. Lawrence and Wayne Counties. Dredging is being proposed as part of Governor Andrew Cuomo's $300 million Resiliency and Economic Development Initiative to develop long-term operational and maintenance and funding plans for recreational navigation channels in the future. Dredging projects for Oak Orchard Harbor and Johnson Creek in Orleans County are included under Phase I and II of this program. Phase III involves the State working with local County officials in Niagara and Orleans County, as well as the Regional Dredging Management Planning Council, to develop long-term plans to ensure navigation channels remain open.

Estimated Project Cost:	$15,000,000 (Phase III)
Potential Funding Sources:	NYS REDI funding; NYS Environmental Protection Fund; NYS Legislative Grant Program; Great Lakes Restoration Initiative
Potential Project Partners:	Army Corps. of Engineers, NYSDOS, NYSDEC, Town of Carlton
Potential Approvals/Permits:	To be determined as part of project design
Estimated Timeframe:	2 to 5 years

- *Orleans County Marine Park Erosion Control*
  Orleans County Marine Park is owned by the NYSOPRHP, but the County has a long-term lease to operate and maintain it. As depicted in the photo, there is an area under the high-span bridge for the Lake Ontario State Parkway where bank erosion has exposed a storm drainage pipe. Erosion in this area has been ongoing for years but was accelerated by the wet springs in 2017 and 2019. The erosion is now encroaching on the wooden fence rail and pedestrian trail that extends along the top of the gorge. If this

problem worsens, this section of the trail will have to be closed to the public.

Estimated Project Cost: $75,000,000
Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: Army Corps. of Engineers, NYSOPRHP, Orleans County
Potential Approvals/Permits: To be determined as part of project design
Estimated Timeframe: 1 to 2 years

- *Erosion control along north shore of Lake Alice on Oak Orchard Road*
  The shoreline along Oak Orchard River Road, at the western edge of Lake Alice, is eroding and there is growing need for mitigation to protect the integrity stabilize this roadway and protect public welfare. At present, an approximate half-mile section of the road is restricted to one-way traffic flow. It is the Town's intention to purchase three residential properties and a portion of a farm lot and demolish the private residences, which would enable the County to relocate a segment of Oak Orchard Road further inland, away from the eroding shoreline. In turn, the roadway would be reestablished for two-way travel and additional shoreline would be stabilized to slow the rate of erosion.

Estimated Project Cost: $5,000,000
Potential Funding Sources: NYS Environmental Protection Fund; NYS Legislative Grant Program; Orleans County Capital Budget
Potential Project Partners: NYSDOS, NYSDEC, Orleans County, Town of Carlton
Potential Approvals/Permits: To be determined as part of project design
Estimated Timeframe: 2 to 5 years

- *Lakeshore Road (Route 97)*
  The bluff adjacent to Lakeshore Road is eroding rapidly and creating a hazardous situation for existing roadway infrastructure and the public water supply line adjacent to the road. This project seeks to address bluff erosion along approximately 1,500 feet of Lakeshore Road, as well as remediation of existing shoreline protection that is failing. The project includes stabilization measures to protect the toe of the bluff, bluff stabilization through grading and

fill (where possible) and the installation of vegetation along the embankment. Offshore protection measures should also be evaluated.

Estimated Project Cost: $2,062,000 (State funding)
Potential Funding Sources: NYS REDI Program Funding; NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners: NYSDOS, NYSDEC, Orleans County, Town of Carlton
Potential Approvals/Permits: Multi-jurisdiction permit review will be required
Estimated Timeframe: 2 to 5 years

- *Lakeside Park Road West*
  The shoreline on which Lakeside Park Road sites has been experiencing flooding impacts from both Johnson Creek and Lake Ontario., including loss of an access road/fire lane., land protecti0n homes and land protection for public water supply lines. West of the intersection with Lakeside Park Road there is approximately 300 linear feet of public water line that is at risk of being exposed and compromised. Mitigation measures proposed under this project include the construction of an access road to enable the placement of materials along the shoreline and the placement of riprap stone to protect the water line during future high-water level events. This project will address public health and safety concerns and protect critical public infrastructure. Minimizing erosion along this roadway and stabilizing the shoreline will also enable continued access.

  Estimated Project Cost: $235,000 (State funding)
  Potential Funding Sources: NYS REDI Program Funding; NYS Environmental Protection Fund; NYS Legislative Grant Program
  Potential Project Partners: NYSDOS, NYSDEC, Orleans County, Town of Carlton
  Potential Approvals/Permits: Multi-jurisdiction permit review will be required
  Estimated Timeframe: 2 to 5 years

- *Lakeside Park Road East*
  The bluff on which the eastern portion of Lakeside Park Road East is located is eroding, creating a 30 to 40-foot drop off that has become a hazardous condition for existing roadway infrastructure and the public water supply line adjacent to the road. This project seeks to protect these public assets and includes stabilization measures to protect the toe of the bluff and the installation of vegetation along the embankment. Where possible, the bluff will be graded back to create a more stable slope condition. This project will address public health and safety concerns and protect critical public infrastructure and maintain safe roadway access.

Estimated Project Cost:	$385,000 (State funding)
Potential Funding Sources:	NYS REDI Program Funding; NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, Orleans County, Town of Carlton
Potential Approvals/Permits:	Multi-jurisdiction permit review will be required.
Estimated Timeframe:	2 to 5 years

- *Former Crawdaddy's Marina*
  Crawdaddy's Marina is located in the Three Bridges area in the Town of Carlton. Rising water levels in Lake Ontario are impacting the dockage at this marina; there are times when dock structures are submerged, which removes them from viable use and impacts the economic viability of the marina. The existing fixed elevation dock facilities must be removed and replaced with floating docks and slips that would only permit vertical dock movement and increase their resiliency. This project, a 2019 REDI submission, will protect and maintain recreational boating access at the marina and sustain boating activity and tourism, which is important to the Orleans County economy.

Estimated Project Cost:	$534,000 (as per REDI estimates)
Potential Funding Sources:	NYS REDI funding; NYS Environmental Protection Fund; NYS Legislative Grant Program; Great Lakes Protection Fund
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, Town of Carlton, Orleans County
Potential Approvals/Permits:	To be determined as part of project design
Estimated Timeframe:	5 years

- *Ernst's Lake Breeze Marina*
  Ernst's Lake Breeze Marina is located north of Lake Ontario State Parkway in the Town of Carlton. The marina is being impacted by the rising water levels in Lake Ontario; during times of high water the fueling station becomes submerged. This is a public safety hazard and can adversely impact water quality in Oak Orchard Creek. A 2019 REDI submission, fixed elevation docks would be replaced with floating docks and slips, including anchorage and posts, to permit only vertical dock movement. Additionally, the fueling station requires upgrade to alleviate this situation to ensure proper functioning of this facility and to protect public health and the environment in this area. It is essential to ensure that marina support facilities of this nature are available for public use.

Estimated Project Cost:	$1,853,000 (as per REDI estimates)
Potential Funding Sources:	NYS REDI funding; NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, Town of Carlton, Orleans County
Potential Approvals/Permits:	To be determined as part of project design
Estimated Timeframe:	5 years

Town of Kendall

- *Public town road ends, culverts*
  Culverts adjacent to Ed Rose Shore, Knapp Shore and Thompson Drive have been impacted by high water levels that has resulted in the culvert ends being clogged with debris. This project will involve the installment of more resilient box culvert structures. Additionally, a culvert located at Lakeland Beach Road will be fortified with riprap to provide stabilization of the culvert end. These upgrades will reduce the risk of flooding, protecting the environment and public health and safety.

Estimated Project Cost:	$1,500,000 (State Funding)
Potential Funding Sources:	NYS REDI Funding; NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, Orleans County, Town of Kendall
Potential Approvals/Permits:	To be determined as part of project design; likely multi-jurisdictional permit review
Estimated Timeframe:	2 to 5 years

- *Hamlin-Kendall Intermunicipal Sewer District Creation – Wastewater Infrastructure*
  Lakeside residences west of West Kendall Drive, including along Lomond Shore West, Ed Rose Shore, Knapp Shore, Thompson Drive and near Lakeland Beach Road and Bald Eagle Drive in the Town of Kendall (as well as residences near Beachwood Park Road in the Town of Hamlin) experience reduced septic system functioning during high-water level events on Lake Ontario. This project involves the replacement of aging lakefront residential septic systems with connections to modern sewage treatment facilities. The project will create a sewer district through an intermunicipal agreement with the Town of Hamlin and complete the transfer of the sewage treatment facility at the The Cottages at Troutburg to Town control. This project will eliminate public health and safety, as well as water quality, concerns. Initial project steps include:

- The first project will address the Beechwood area in Hamlin and Norway Heights in Monroe County and Bald Eagle Drive in the Town of Kendall.
- Complete sufficient documentation to allow access to grant funding for a preliminary engineering study and development of a cost model.
- Complete the study.
- If study results show that the project is feasible, we will then obtain resident's buy-in.
- If residents support the project, then we will obtain grant funding for the full project.

Estimated Project Cost:	$9,053,000 (State funding)
Potential Funding Sources:	NYS REDI Funding; NYS Environmental Protection Fund; NYS Legislative Grant Program
Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, Town of Kendall
Potential Approvals/Permits:	To be determined as part of project design, likely multi-jurisdictional permit review
Estimated Timeframe:	2 to 5 years

- *Thompson Drive Erosion Restoration*

The terminus of Thompson Drive (turnaround) provides beach access to the Lake Ontario shoreline. This road end was severely damaged as the result of lake storms and high-water levels/flooding causing it to partially collapse onto the shoreline. Restoration efforts are required to reconstruct Thompson Drive and re-establish this area for public use and enjoyment. This would involve reconstruction of the road and the installation of natural or nature-based shoreline protection to address erosion of the turnaround. Natural vegetation will strengthen this area over time as planting take hold and increase in density and abundance.

Estimated Project Cost:	$131,000 (State funding)
Potential Funding Sources:	NYS REDI Funding; NYS Environmental Protection Fund; NYS Legislative Grant Program; Great Lake Restoration Initiative

Potential Project Partners: NYSDOS, NYSDEC, Town of Kendall
Potential Approvals/Permits: To be determined as part of project design; likely multi-jurisdictional permit review
Estimated Timeframe: 2 to 5 years

- *Route 237 Right of Way Erosion Restoration*
  The shoreline/waterfront area along the Route 237 right-of-way is experiencing significant erosion as the result of high-water levels, flooding and wave intensity. While an ongoing project is being undertaken to install riprap along the waterfront to protect the eroding shoreline, this project proposes additional mitigation measures including construction of a berm to further stabilize the shoreline and reduce flooding impacts, filling the gap between the existing shoreline protection with more shoreline protection, and adding a protective barrier to provide public safety and limit access at the end of the road. This project will be tied in with the erosion protection measures that exist on adjoining private properties.

  Estimated Project Cost: $40,000
  Potential Funding Sources: NYS REDI Funding; NYS Environmental Protection Fund; NYS Legislative Grant Program; Great Lakes Restoration Initiative
  Potential Project Partners: NYSDOS, NYSDEC, Town of Kendall
  Potential Approvals/Permits: Permits for ongoing work have been secured
  Estimated Timeframe: 2 to 5 years

- *Bald Eagle Marina*
  Bald Eagle Marina is located north of Lake Ontario State Parkway in the Town of Kendall. The marina is being impacted by the rising water levels in Lake Ontario; during times of high water the docks and fueling station become submerged. This is a public safety hazard and can adversely impact water quality in Oak Orchard Creek. A 2019 REDI submission, fixed elevation docks would be replaced with floating docks and slips, including anchorage and posts, to permit only vertical dock movement. Additionally, the fueling station requires upgrade to alleviate this situation to ensure proper functioning of this facility and to protect public health and the environment in this area. It is essential to ensure that marina support facilities of this nature are available for public use.
  Estimated Project Cost: $1,560,000 (as per REDI estimates)
  Potential Funding Sources: NYS REDI funding; NYS Environmental Protection Fund; NYS Legislative Grant Program

Potential Project Partners:	NYSDOS, NYSDEC, NYSOPRHP, Town of Kendall, Orleans County
Potential Approvals/Permits:	To be determined as part of project design
Estimated Timeframe:	5 years

Potential Funding Sources:

- Clean Water Revolving Fund for Water Pollution Control
- Empire State Development Corporation (ESD) Strategic Community Investment Funds
- Empire State Development Corporation Market New York Grant Program
- Federal Transportation Act (Fixing American's Surface Transportation – FAST or equivalent)
- Great Lakes Protection Fund
- Great Lakes Restoration Initiative
- Land and Water Conservation Fund
- New York State Clean Water/Clean Air Bond Act of 1996
- New York State Community Development Block Grant Program
- New York State Council for the Arts – Arts and Culture Initiatives Program
- NYSERDA Climate Smart Communities Program
- New York State Environmental Protection Fund
- New York State Environmental Facilities Corporation (EFC) Green Innovation Grants
- New York State Legislative Grant Program
- New York State Local Government Efficiency Program
- New York State LWRP Program Implementation Grant Funds
- New York Main Street Program
- New York State Office of Parks, Recreation and Historic Preservation – Parks and Recreational Trails Programs
- New York State Resiliency and Economic Development Initiative
- New York State Revolving Loan Fund
- New York State Wastewater Infrastructure Engineering Planning Grant Program
- New York State Water Quality Improvement Program - Non-Agricultural Nonpoint Source Implementation Grants Program and Wastewater Treatment Improvement Program
- Parks and Trails New York
- USDA Rural Development Program
- Moving Forward Act for infrastructure

SECTION VI State and Federal Actions and Programs Likely to Affect Implementation

6.1 State Actions and Programs Which Should be Undertaken in a Manner Consistent with the LWRP

State and federal actions will affect and be affected by implementation of the LWRP. Under State Law and the U.S. Coastal Zone Management Act, certain State and federal actions within or affecting the local waterfront revitalization area must be consistent, or consistent to the maximum extent practicable, with the enforceable policies and purposes of the LWRP. This consistency requirement makes the LWRP a unique, intergovernmental mechanism for setting policy and making decisions, and helps to prevent detrimental actions from occurring and future options from being needlessly foreclosed. At the same time, the active participation of State and federal agencies is also likely to be necessary to implement specific provisions of the LWRP.

Pursuant to the State Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Executive Law, Article 42), the Secretary of State notifies affected State agencies of those agency actions and programs that are to be undertaken in a manner consistent with approved LWRPs. The following list of State actions and programs is that list. The State Waterfront Revitalization of Coastal Areas and Inland Waterways Act requires that an LWRP identifies those elements of the program that can be implemented by the local government, unaided, and those that can only be implemented with the aid of other levels of government or other agencies. Such statement shall include those permit, license, certification or approval programs; grant, loan subsidy or other funding assistance programs; facilities construction, and planning programs that may affect the achievement of the LWRP.

OFFICE FOR THE AGING

1.0 Funding and/or approval programs for the establishment of new or expanded facilities providing various services for the elderly.

DEPARTMENT OF AGRICULTURE AND MARKETS

1.00 Agricultural Districts Program
2.00 Rural Development Program
3.00 Farm Worker Services Program
4.00 Permit and approval programs:
- 4.01 Custom Slaughters/Processor Permit
- 4.02 Processing Plant License
- 4.03 Refrigerated Warehouse and/or Locker Plant License

5.00 Farmland Protection Implementation Grant
6.00 Agricultural Nonpoint Source Abatement and Control Program

DIVISION OF ALCOHOLIC BEVERAGE CONTROL/ STATE LIQUOR AUTHORITY

1.00 Permit and Approval Programs:
- 1.01 Ball Park - Stadium License

1.02 Bottle Club License
1.03 Bottling Permits
1.04 Brewer's Licenses and Permits
1.05 Brewer's Retail Beer License
1.06 Catering Establishment Liquor License
1.07 Cider Producer's and Wholesaler's Licenses
1.08 Club Beer, Liquor, and Wine Licenses
1.09 Distiller's Licenses
1.10 Drug Store, Eating Place, and Grocery Store Beer Licenses
1.11 Farm Winery and Winery Licenses
1.12 Hotel Beer, Wine, and Liquor Licenses
1.13 Industrial Alcohol Manufacturer's Permits
1.14 Liquor Store License
1.15 On-Premises Liquor Licenses
1.16 Plenary Permit (Miscellaneous-Annual)
1.17 Summer Beer and Liquor Licenses
1.18 Tavern/Restaurant and Restaurant Wine Licenses
1.19 Vessel Beer and Liquor Licenses
1.20 Warehouse Permit
1.21 Wine Store License
1.22 Winter Beer and Liquor Licenses
1.23 Wholesale Beer, Wine, and Liquor Licenses

OFFICE OF ALCOHOLISM AND SUBSTANCE ABUSE SERVICES

1.00 Facilities, construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Permit and approval programs:
2.01 Certificate of approval (Substance Abuse Services Program)
3.00 Permit and approval:
3.01 Letter Approval for Certificate of Need
3.02 Operating Certificate (Alcoholism Facility)
3.03 Operating Certificate (Community Residence)
3.04 Operating Certificate (Outpatient Facility)
3.05 Operating Certificate (Sobering-Up Station)

COUNCIL ON THE ARTS

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Architecture and environmental arts program.

OFFICE OF CHILDREN AND FAMILY SERVICES

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Homeless Housing and Assistance Program.
3.00 Permit and approval programs:
3.01 Certificate of Incorporation (Adult Residential Care Facilities)
3.02 Operating Certificate (Children's Services)
3.03 Operating Certificate (Enriched Housing Program)
3.04 Operating Certificate (Home for Adults)
3.05 Operating Certificate (Proprietary Home)
3.06 Operating Certificate (Public Home)

3.07 Operating Certificate (Special Care Home)
3.08 Permit to Operate a Day Care Center

DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION
1.0 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

DORMITORY AUTHORITY OF THE STATE OF NEW YORK
1.00 Financing of higher education and health care facilities.
2.00 Planning and design services assistance program.

EDUCATION DEPARTMENT
1.00 Facilities construction, rehabilitation, expansion, demolition or the funding of such activities.
2.00 Permit and approval programs:
- 2.01 Certification of Incorporation (Regents Charter)
- 2.02 Private Business School Registration
- 2.03 Private School License
- 2.04 Registered Manufacturer of Drugs and/or Devices
- 2.05 Registered Pharmacy Certificate
- 2.06 Registered Wholesale of Drugs and/or Devices
- 2.07 Registered Wholesaler-Repacker of Drugs and/or Devices
- 2.08 Storekeeper's Certificate

3.00 Administration of Article 5, Section 233 of the Educational Law regarding the removal of archaeological and paleontological objects under the waters of the State.

OFFICE OF EMERGENCY MANAGEMENT
- hazard identification,
- loss prevention, planning, training, operational response to emergencies,
- technical support, and disaster recovery assistance.

EMPIRE STATE DEVELOPMENT/ EMPIRE STATE DEVELOPMENT CORPORATION
1.00 Preparation or revision of statewide or specific plans to address State economic development needs.
2.00 Allocation of the state tax-free bonding reserve.

ENERGY RESEARCH AND DEVELOPMENT AUTHORITY
1.00 Issuance of revenue bonds to finance pollution abatement modifications in power-generation facilities and various energy projects.
2.00 New Construction Program – provide assistance to incorporate energy-efficiency measures into the design, construction and operation of new and substantially renovated buildings.
3.00 Existing Facilities Program – offers incentives for a variety of energy projects

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of lands under the jurisdiction of the Department.
2.00 Classification of Waters Program; classification of land areas under the Clean Air Act.
3.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
4.00 Financial assistance/grant programs:
- 4.01 Capital projects for limiting air pollution
- 4.02 Cleanup of toxic waste dumps
- 4.03 Flood control, beach erosion, and other water resource projects

4.04 Operating aid to municipal wastewater treatment facilities
4.05 Resource recovery and solid waste management capital projects
4.06 Wastewater treatment facilities

6.00 Implementation of the Environmental Quality Bond Act of 1972, including:
(a) Water Quality Improvement Projects
(b) Land Preservation and Improvement Projects including Wetland Preservation and Restoration Projects, Unique Area Preservation Projects, Metropolitan Parks Projects, Open Space Preservation Projects, and Waterways Projects.

7.00 Marine Finfish and Shellfish Programs

9.00 Permit and approval programs

Air Resources

9.01 Certificate of Approval for Air Pollution Episode Action Plan
9.02 Certificate of Compliance for Tax Relief – Air Pollution Control Facility
9.03 Certificate to Operate: Stationary Combustion Installation; Incinerator; process, exhaust or Ventilation System
9.04 Permit for Burial of Radioactive Material
9.05 Permit for Discharge of Radioactive Material to Sanitary Sewer
9.06 Permit for Restricted Burning
9.07 Permit to Construct; a Stationary Combustion Installation; Incinerator; Indirect Source of Air Contamination; Process, Exhaust or Ventilation System

Construction Management

9.08 Approval of Plans and Specifications for Wastewater Treatment Facilities

Fish and Wildlife

9.09 Certificate to Possess and Sell Hatchery Trout in New York State
9.10 Commercial Inland Fisheries Licenses
9.11 Fishing Preserve License
9.12 Fur Breeder's License
9.13 Game Dealer's License
9.14 Licenses to breed Domestic Game Animals
9.15 License to Possess and Sell Live Game
9.16 Permit to Import, Transport and/or Export under Section 184.1 (11-0511)
9.17 Permit to Raise and Sell trout
9.18 Private Bass Hatchery Permit
9.19 Shooting Preserve Licenses
9.20 Taxidermy License
9.21 Permit – Article 15, (Protection of Water) – Dredge and Deposit Material in a Waterway
9.22 Permit – Article 15, (Protection of Water) – Stream Bed or Bank Disturbances
9.23 Permit – Article 24, (Freshwater Wetlands)

Hazardous Substances

9.24 Permit to Use Chemicals for the Control or Elimination of Aquatic Insects
9.25 Permit to Use Chemicals for the Control or Elimination of Aquatic Vegetation
9.26 Permit to Use Chemicals for the Control or Elimination of Undesirable Fish

Lands and Forest

9.27 Certificate of Environmental Safety (Liquid Natural Gas/Liquid Petroleum Gas)
9.28 Floating Object Permit
9.29 Marine Regatta Permit
9.30 Navigation Aid Permit

Marine Resources
9.31 Digger's Permit (Shellfish)
9.32 License of Menhaden Fishing Vessel
9.33 License for Non Resident Food Fishing Vessel
9.34 Non Resident Lobster Permit
9.35 Marine Hatchery and/or Off Bottom Culture Shellfish Permits
9.36 Permits to Take Blue Claw Crabs
9.37 Permit to Use Pond or Trap Net
9.38 Resident Commercial Lobster Permit
9.39 Shellfish Bed Permit
9.40 Shellfish Shipper's Permits
9.41 Special Permit to Take Surf Clams from Waters other than the Atlantic Ocean
9.42 Permit – Article 25, (Tidal Wetlands)
Mineral Resources
9.43 Mining Permit
9.44 Permit to Plug and Abandon (a non-commercial, oil, gas or solution mining well)
9.45 Underground Storage Permit (Gas)
9.46 Well Drilling Permit (Oil, Gas and Solution Salt Mining)
Solid Wastes
9.47 Permit to Construct and/or operate a Solid Waste Management Facility
9.48 Septic Tank Cleaner and Industrial Waste Collector Permit
Water Resources
9.49 Approval of Plans for Wastewater Disposal Systems
9.50 Certificate of Approval of Realty Subdivision Plans
9.51 Certificate of Compliance (Industrial Wastewater Treatment Facility)
9.52 Letters of Certification for Major Onshore Petroleum Facility Oil Spill Prevention and Control Plan
9.53 Permit Article 36, (Construction in Flood Hazard Areas)
9.54 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas
9.55 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas
9.56 State Pollutant Discharge Elimination System (SPDES) Permit
9.57 Approval – Drainage Improvement District
9.58 Approval – Water (Diversions for Power)
9.59 Approval of Well System and Permit to Operate
9.60 Permit – Article 15, (Protection of Water) – Dam
9.61 Permit – Article 15, Title 15 (Water Supply)
9.62 River Improvement District Permits
9.63 River Regulatory District approvals
9.64 Well Drilling Certificate of Registration
9.65 401 Water Quality Certification
10.00 Preparation and revision of Air Pollution State Implementation Plan.
11.00 Preparation and revision of Continuous Executive Program Plan.
12.00 Preparation and revision of Statewide Environmental Plan.
13.00 Protection of Natural and Man-made Beauty Program.
14.00 Urban Fisheries Program.
15.00 Urban Forestry Program.
16.00 Urban Wildlife Program.

ENVIRONMENTAL FACILITIES CORPORATION

1.0 Financing program for pollution control facilities for industrial firms and small businesses.

DEPARTMENT OF FINANCIAL SERVICES (DEPARTMENT OF BANKING)

1.00 Permit and approval programs:
- 1.01 Authorization Certificate (Bank Branch)
- 1.02 Authorization Certificate (Bank Change of Location)
- 1.03 Authorization Certificate (Bank Charter)
- 1.04 Authorization Certificate (Credit Union Change of Location)
- 1.05 Authorization Certificate (Credit Union Charter)
- 1.06 Authorization Certificate (Credit Union Station)
- 1.07 Authorization Certificate (Foreign Banking Corporation Change of Location)
- 1.08 Authorization Certificate (Foreign Banking Corp. Public Accommodations Office)
- 1.09 Authorization Certificate (Investment Company Branch)
- 1.10 Authorization Certificate (Investment Company Change of Location)
- 1.11 Authorization Certificate (Investment Company Charter)
- 1.12 Authorization Certificate (Licensed Lender Change of Location)
- 1.13 Authorization Certificate (Mutual Trust Company Charter)
- 1.14 Authorization Certificate (Private Banker Charter)
- 1.15 Authorization Certificate (Public Accommodation Office – Banks)
- 1.16 Authorization Certificate (Safe Deposit Company Branch)
- 1.17 Authorization Certificate (Safe Deposit Company Change of Location)
- 1.18 Authorization Certificate (Safe Deposit Company Charter)
- 1.19 Authorization Certificate (Savings Bank Charter)
- 1.20 Authorization Certificate (Savings Bank DeNovo Branch Office)
- 1.21 Authorization Certificate (Savings Bank Public Accommodations Office)
- 1.22 Authorization Certificate (Savings and Loan Association Branch)
- 1.23 Authorization Certificate (Savings and Loan Association Change of Location)
- 1.24 Authorization Certificate (Savings and Loan Association Charter)
- 1.25 Authorization Certificate (Subsidiary Trust Company Charter)
- 1.26 Authorization Certificate (Trust Company Branch)
- 1.27 Authorization Certificate (Trust Company – Change of Location)
- 1.28 Authorization Certificate (Trust Company Charter)
- 1.29 Authorization Certificate (Trust Company Public Accommodations Office)
- 1.30 Authorization to Establish a Life Insurance Agency
- 1.31 License as a Licensed Lender
- 1.32 License for a Foreign Banking Corporation Branch

OFFICE OF GENERAL SERVICES

1.00 Administration of the Public Lands Law for acquisition and disposition of lands, grants of land and grants of easement of land under water, issuance of licenses for removal of materials from lands under water, and oil and gas leases for exploration and development.

2.00 Administration of Article 4 B, Public Buildings Law, in regard to the protection and management of State historic and cultural properties and State uses of buildings of historic, architectural or cultural significance.

3.00 Facilities construction, rehabilitation, expansion, or demolition.

4.00 Administration of Article 5, Section 233, Subsection 5 of the Education Law on removal of archaeological and paleontological objects under the waters of the State.

5.00 Administration of Article 3, Section 32 of the Navigation Law regarding location of structures in or on navigable waters.
6.00 Section 334 of the State Real Estate Law regarding subdivision of waterfront properties on navigable waters to include the location of riparian lines.

DEPARTMENT OF HEALTH
1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Permit and approval programs:
- 2.01 Approval of Completed Works for Public Water Supply Improvements
- 2.02 Approval of Plans for Public Water Supply Improvements.
- 2.03 Certificate of Need (Health Related Facility except Hospitals)
- 2.04 Certificate of Need (Hospitals)
- 2.05 Operating Certificate (Diagnostic and Treatment Center)
- 2.06 Operating Certificate (Health Related Facility)
- 2.07 Operating Certificate (Hospice)
- 2.08 Operating Certificate (Hospital)
- 2.09 Operating Certificate (Nursing Home)
- 2.10 Shared Health Facility Registration Certificate

DIVISION OF HOMES AND COMMUNITY RENEWAL and its subsidiaries and affiliates
1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Financial assistance/grant programs:
- 2.01 Federal Housing Assistance Payments Programs (Section 8 Programs)
- 2.02 Housing Development Fund Programs
- 2.03 Neighborhood Preservation Companies Program
- 2.04 Public Housing Programs
- 2.05 Rural Initiatives Grant Program
- 2.06 Rural Preservation Companies Program
- 2.07 Rural Rental Assistance Program
- 2.08 Special Needs Demonstration Projects
- 2.09 Urban Initiatives Grant Program
- 2.10 Urban Renewal Programs

3. 00 Preparation and implementation of plans to address housing and community renewal needs.

OFFICE OF MENTAL HEALTH
1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Permit and approval programs:
- 2.01 Operating Certificate (Community Residence)
- 2.02 Operating Certificate (Family Care Homes)
- 2.03 Operating Certificate (Inpatient Facility)
- 2.04 Operating Certificate (Outpatient Facility)

DIVISION OF MILITARY AND NAVAL AFFAIRS
1.0 Preparation and implementation of the State Disaster Preparedness Plan.

NATURAL HERITAGE TRUST

1.0 Funding program for natural heritage institutions.

OFFICE OF PARKS, RECREATION, AND HISTORIC PRESERVATION (including Regional State Park Commission)

1.00 Acquisition, disposition, lease, grant of easement, or other activities related to the management of land under the jurisdiction of the Office.
2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
3.00 Funding program for recreational boating, safety, and enforcement.
4.00 Funding program for State and local historic preservation projects.
5.00 Land and Water Conservation Fund programs.
6.00 Nomination of properties to the Federal and/or State Register of Historic Places.
7.00 Permit and approval programs:
- 7.01 Floating Objects Permit
- 7.02 Marine Regatta Permit
- 7.03 Navigation Aide Permit
- 7.04 Posting of Signs Outside State Parks

8.00 Preparation and revision of the Statewide Comprehensive Outdoor Recreation Plan and the Statewide Comprehensive Historic Preservation Plan and other plans for public access, recreation, historic preservation or related purposes.
9.00 Recreation services program.
10.00 Urban Cultural Parks Program.
11.00 Planning, construction, rehabilitation, expansion, demolition or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.

OFFICE FOR PEOPLE WITH DEVELOPMENTAL DISABILITIES

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
2.00 Permit and approval programs:
- 2.01 Establishment and Construction Prior Approval
- 2.02 Operating Certificate Community Residence
- 2.03 Outpatient Facility Operating Certificate

POWER AUTHORITY OF THE STATE OF NEW YORK

1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of land under the jurisdiction of the Authority.
2.00 Facilities construction, rehabilitation, expansion, or demolition.

ROCHESTER-GENESEE REGIONAL TRANSPORTATION AUTHORITY (regional agency)

1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the Authority.
2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
3.00 Increases in special fares for transportation services to public water-related recreation resources.

NEW YORK STATE SCIENCE AND TECHNOLOGY FOUNDATION

1.00 Corporation for Innovation Development Program.
2.00 Center for Advanced Technology Program.

DEPARTMENT OF STATE

1.00 Appalachian Regional Development Program.
2.00 Coastal Management Program.

2.10 Planning, construction, rehabilitation, expansion, demolition or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.

3.00 Community Services Block Grant Program.

4.00 Permit and approval programs:
- 4.01 Billiard Room License
- 4.02 Cemetery Operator
- 4.03 Uniform Fire Prevention and Building Code

STATE UNIVERSITY CONSTRUCTION FUND

1.0 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

STATE UNIVERSITY OF NEW YORK

1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of land under the jurisdiction of the University.

2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

DEPARTMENT OF TRANSPORTATION

1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of land under the jurisdiction of the Department.

2.00 Construction, rehabilitation, expansion, or demolition of facilities, including but not limited to:
- (a) Highways and parkways
- (b) Bridges on the State highways system
- (c) Highway and parkway maintenance facilities
- (d) Rail facilities

3.00 Financial assistance/grant programs:
- 3.01 Funding programs for construction/reconstruction and reconditioning/preservation of municipal streets and highways (excluding routine maintenance and minor rehabilitation)
- 3.02 Funding programs for development of the ports of Albany, Buffalo, Oswego, Ogdensburg and New York
- 3.03 Funding programs for rehabilitation and replacement of municipal bridges
- 3.04 Subsidies program for marginal branch lines abandoned by Conrail
- 3.05 Subsidies program for passenger rail service

4.00 Permits and approval programs:
- 4.01 Approval of applications for airport improvements (construction projects)
- 4.02 Approval of municipal applications for Section 18 Rural and Small Urban Transit Assistance Grants (construction projects)
- 4.03 Approval of municipal or regional transportation authority applications for funds for design, construction and rehabilitation of omnibus maintenance and storage facilities
- 4.04 Approval of municipal or regional transportation authority applications for funds for design and construction of rapid transit facilities
- 4.05 Certificate of Convenience and Necessity to Operate a Railroad
- 4.06 Highway Work Permits
- 4.07 License to Operate Major Petroleum Facilities
- 4.08 Outdoor Advertising Permit (for off premises advertising signs adjacent to interstate and primary highway)
- 4.09 Real Property Division Permit for Use of State Owned Property

5.00 Preparation or revision of the Statewide Master Plan for Transportation and sub-area or special plans and studies related to the transportation needs of the State.
6.00 Water Operation and Maintenance Program Activities related to the containment of petroleum spills and development of an emergency oil spill control network.

DIVISION OF YOUTH
1.0 Facilities construction, rehabilitation, expansion, or demolition or the funding for approval of such activities.

6.2 Federal Activities Affecting Land and Water Uses and Natural Resources in the Coastal Zone of New York State

Note: This LWRP's list of the federal agency activities is identical to the most recent version of the Table 3 list in the New York State Coastal Management Program as approved by the federal Office for Coastal Management on May 7, 2017. Please contact the New York State Department of State, Office of Planning and Development, at (518) 474-6000, for any updates to New York State Coastal Management Program Table 3 federal agency activities list that may have occurred post-approval of this LWRP.

This list has been prepared in accordance with the consistency provisions of the federal Coastal Zone Management Act and implementing regulations in 15 CFR Part 930. It is not exhaustive of all activities subject to the consistency provisions of the federal Coastal Zone Management Act, implementing regulations in 15 CFR Part 930, and the New York Coastal Management Program. It includes activities requiring:

1. the submission of consistency determinations by federal agencies;
2. the submission of consistency certifications by entities other than federal agencies; and
3. the submission of necessary data and information to the New York State Department of State, in accordance with 15 CFR Part 930, Subparts C, D, E, F and I, and the New York Coastal Management Program.

I. Activities Undertaken Directly by or on Behalf of Federal Agencies

The following activities, undertaken directly by or on behalf of the identified federal agencies, are subject to the consistency provisions of the Coastal Zone Management Act, its implementing regulations in 15 CFR Part 930, Subpart C, and the New York Coastal Management Program.

Department of Commerce, National Marine Fisheries Service:
- Fisheries Management Plans

Department of Defense, Army Corps of Engineers:
- Proposed authorizations for dredging, channel improvement, breakwaters, other navigational works, erosion control structures, beach replenishment, dams or flood control works, ice management practices and activities, and other projects with the potential to impact coastal lands and waters.
- Land acquisition for spoil disposal or other purposes.
- Selection of open water disposal sites.

Department of Defense, Air Force, Army and Navy:

- Location, design, and acquisition of new or expanded defense installations (active or reserve status, including associated housing, transportation or other facilities).
- Plans, procedures and facilities for handling or storage use zones.
- Establishment of impact, compatibility or restricted use zones.

Department of Energy:

- Prohibition orders.

General Services Administration:

- Acquisition, location and design of proposed federal government property or buildings, whether leased or owned by the federal government.

Department of Interior, Fish and Wildlife Service:

- Management of National Wildlife refuges and proposed acquisitions.

Department of Interior, National Park Service:

- National Park and Seashore management and proposed acquisitions.

Department of Interior, Bureau of Ocean Energy Management

- OCS lease sale activities including tract selection, lease sale stipulations, etc.

Department of Homeland Security, Coast Guard:

- Location and design, construction or enlargement of Coast Guard stations, bases, and lighthouses.
- Location, placement or removal of navigation devices which are not part of the routine operations under-the Aids to Navigation Program (ATON).
- Expansion, abandonment, designation or anchorages, lightering areas or shipping lanes and ice management practices and activities.

Department of Transportation, Federal Aviation Administration:

- Location and design, construction, maintenance, and demolition of Federal aids to air navigation.

Department of Transportation, St. Lawrence Seaway Development Corporation:

- Acquisition, location, design, improvement and construction of new and existing facilities for the operation of the Seaway, including traffic safety, traffic control and length of navigation season.

Department of Transportation, Federal Highway Administration:

- Highway construction

II. Federal Licenses and Permits and Other Forms of Approval or Authorization

The following activities, requiring permits, licenses, or other forms of authorization or approval from federal agencies, are subject to the consistency provisions of the Coastal Zone Management Act, its implementing regulations in 15 CFR Part 930, Subpart D, and the New York Coastal Management Program.

Department of Defense, Army Corps of Engineers:

- Construction of dams, dikes or ditches across navigable waters, or obstruction or alteration of navigable waters required under Sections 9 and 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401, 403).
- Establishment of harbor lines pursuant to Section 11 of the Rivers and Harbors Act of 1899 (33 U.S.C. 404, 405).
- Occupation of seawall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the U.S. pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408).
- Approval of plans for improvements made at private expense under USACE supervision pursuant to the Rivers and Harbors Act of 1902 (33 U.S.C. 565).
- Disposal of dredged spoils into the waters of the U.S., pursuant to the Clean Water Act, Section 404 (33 U.S.C. 1344).
- All actions for which permits are required pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- Construction of artificial islands and fixed structures in Long Island Sound pursuant to Section 4 (f) of the River and Harbors Act of 1912 (33 U.S.C.).

Department of Energy, Federal Energy Regulatory Commission:

- Licenses for non-federal hydroelectric projects and primary transmission lines under Sections 3 (11), 4 (e) and 15 of the Federal Power Act (16 U.S.C. 796 (11), 797 (11) and 808).
- Orders for interconnection of electric transmission facilities under Section 202 (b) of the Federal Power Act (15 U.S.C. 824 a (b)).
- Certificates for the construction and operation of interstate natural gas pipeline facilities, including both pipelines and terminal facilities under Section 7 (c) of the Natural Gas Act (15 U.S.0 717 f (c)).
- Permission and approval for the abandonment of natural gas pipeline facilities under Section 7(b) of the Natural Gas Act (15 U.S.C. 717 f (b)).

Department of Energy, Economic Regulatory Commission:

- Regulation of gas pipelines, and licensing of import or export of natural gas pursuant to the Natural Gas Act (15 U.S.C. 717) and the Energy Reorganization Act of 1974.
- Exemptions from prohibition orders.

Environmental Protection Agency:

- NPDES permits and other permits for Federal installations, discharges in contiguous zones and ocean waters, sludge runoff and aquaculture permits pursuant to Sections

401, 402, 403, 405, and 318 of the Federal Grater Pollution Control Act of 1972 (33 U.S.C. 1341, 1342, 1343, and 1328).
- Permits pursuant to the Resources Recovery and Conservation Act of 1976.
- Permits pursuant to the underground injection Control program under Section 1424 of the Safe Water Drinking Water Act (42 U.S.C. 300 h-c).
- Permits pursuant to the Clean Air Act of 1976 (42 U.S.C. 1857).

Department of Interior, Fish and Wildlife Services:
- Endangered species permits pursuant to the Endangered Species Act (16 U.S.C. 153 (a)).

Department of Interior, Bureau of Ocean Energy Management:
- Permits to drill, rights of use and easements for construction and maintenance of pipelines, gathering and flow lines and associated structures pursuant to 43 U.S.C. 1334, exploration and development plans, and any other permits or authorizations granted for activities described in detail in OCS exploration, development, and production plans.
- Permits required for pipelines crossing federal lands, including OCS lands, and associated activities pursuant to the OCS Lands Act (43 U.S.C. 1334) and 43 U.S.C. 931 (c) and 20 U.S.C. 185.

Surface Transportation Board:
- Authority to abandon railway lines (to the extent that the abandonment involves removal of trackage and disposition of right-of-way); authority to construct railroads; authority to construct slurry pipelines.

Nuclear Regulatory Commission:
- Licensing and certification of the siting, construction, and operation of nuclear power plants, pursuant to Atomic Energy Act of 1954, Title II of the Energy Reorganization Act of 1974 and the National Environmental Policy Act of 1969.

Department of Transportation:
- Construction or modification of bridges, causeways or pipelines over navigable waters pursuant to 49 U.S.C. 1455.
- Permits for Deepwater Ports pursuant to the Deepwater Ports Act of 1974 (33 U.S.C. 1501).

Department of Transportation, Federal Aviation Administration:
- Permits and licenses for construction, operation or alteration of airports.

III. Federal Financial Assistance to State and Local Governments

The following activities, involving financial assistance from federal agencies to state and local governments, are subject to the consistency provisions of the Coastal Zone Management Act, its implementing regulations in 15CFR Part 930, Subpart F, and the New York Coastal Management Program. When these activities involve financial assistance for entities other than State and local governments, the activities are subject to the consistency provisions of 15 CFR Part 930, Subpart C.

Department of Agriculture

10.068 Rural Clean Water Program
10.409 Irrigation, Drainage, and Other Soil and Water Conservation Loans
10.410 Low to Moderate Income Housing Loans
10.411 Rural Housing Site Loans
10.413 Recreation Facility Loans
10.414 Resource Conservation and Development Loans
10.415 Rural Rental Housing Loans
10.416 Soil and Water Loans
10.418 Water and Waste Disposal Systems for Rural Communities
10.419 Watershed Protection and Flood Prevention Loans
10.422 Business and Industrial Loans
10.423 Community Facilities Loans
10.424 Industrial Development Grants
10.426 Area Development Assistance Planning Grants
10.429 Above Moderate Income Housing Loans
10.430 Energy Impacted Area Development Assistance Program
10.901 Resource Conservation and Development
10.902 Soil and Water Conservation
10.904 Watershed Protection and Flood Prevention
10.906 River Basin Surveys and Investigations

Department of Commerce

11.300 Economic Development - Grants and Loans for Public Works and Development Facilities
11.301 Economic Development - Business Development Assistance
11.302 Economic Development - Support for Planning Organizations
11.304 Economic Development - State and Local Economic Development Planning
11.305 Economic Development - State and Local Economic Development Planning
11.307 Special Economic Development and Adjustment Assistance Program - Long Term Economic Deterioration
11.308 Grants to States for Supplemental and Basic Funding of Titles I, II, III, IV, and V Activities
11.405 Anadromous and Great Lakes Fisheries Conservation
11.407 Commercial Fisheries Research and Development
11.417 Sea Grant Support
11.427 Fisheries Development and Utilization Research and Demonstration Grants and Cooperative Agreements Program
11.501 Development and Promotion of Ports and Intermodal Transportation
11.509 Development and Promotion of Domestic Water-borne Transport Systems

Department of Housing and Urban Development
14. 112 Mortgage Insurance - Construction or Substantial Rehabilitation of Condominium Projects
14. 115 Mortgage Insurance - Development of Sales Type Cooperative Projects
14. 117 Mortgage Insurance - Homes
14. 124 Mortgage Insurance - Investor Sponsored Cooperative Housing
14. 125 Mortgage Insurance - Land Development and New Communities
14. 126 Mortgage Insurance - Manages ant Type Cooperative Projects
14. 127 Mortgage Insurance - Mobile Home Parks
14. 218 Community Development Block Grants/Entitlement Grants
14. 219 Community Development Block Grants/Small Cities Program
14. 221 Urban Development Action Grants
14. 223 Indian Community Development Block Grant Program

Department of the Interior
15.400 Outdoor Recreation - Acquisition, Development and Planning
15.402 Outdoor Recreation - Technical Assistance
15.403 Disposal of Federal Surplus Real Property for Parks, Recreation, and Historic Monuments
15.411 Historic Preservation Grants-In-Aid
15.417 Urban Park and Recreation Recovery Program
15.600 Anadromous Fish Conservation
15.605 Fish Restoration
15.611 Wildlife Restoration
15.613 Marine Mammal Grant Program
15.802 Minerals Discovery Loan Program
15.950 National Water Research and Development Program
15.951 Water Resources Research and Technology - Assistance to State Institutes
15.952 Water Research and Technology-Matching Funds to State Institutes

Department of Transportation
20.102 Airport Development Aid Program
20.103 Airport Planning Grant Program
20.205 Highway Research, Planning, and Construction Railroad Rehabilitation and Improvement - Guarantee of Obligations
20.309 Railroad Rehabilitation and Improvement – Guarantee of Obligations
20.310 Railroad Rehabilitation and Improvement - Redeemable Preference Shares
20.506 Urban Mass Transportation Demonstration Grants
20.509 Public Transportation for Rural and Small Urban Areas

General Services Administration
39.002 Disposal of Federal Surplus Real Property

Community Services Administration
49.002 Community Action
49.011 Community Economic Development
49.013 State Economic Opportunity Offices
49.017 Rural Development Loan Fund
49.018 Housing and Community Development (Rural Housing)

Small Business Administration
59.012 Small Business Loans
59.013 State and Local Development Company Loans
59.024 Water Pollution Control Loans
59.025 Air Pollution Control Loans
59.031 Small Business Pollution Control Financing Guarantee

Environmental Protection Agency
66.001 Air Pollution Control Program Grants
66.418 Construction Grants for Wastewater Treatment Works
66.426 Water Pollution Control - State and Area-wide Water Quality Management Planning Agency
66.451 Solid and Hazardous Waste Management Program Support Grants
66.452 Solid Waste Management Demonstration Grants
66.600 Environmental Protection Consolidated Grants Program Support
66.800 Comprehensive Environmental Response, Compensation and Liability (Superfund)

Note: Numbers refer to the Catalog of Federal Domestic Assistance Programs, 1980 and its subsequent updates.

SECTION VII - Local Commitment and Consultation

7.1 Local Commitment

The Towns of Kendall, Yates and Carlton and the Village of Lyndonville initiated efforts to prepare a Local Waterfront Revitalization Program (LWRP) in September of 2017, at which time Orleans County worked with the participating communities to establish the Waterfront Advisory Committee to oversee and assist with the updating the existing program. The Waterfront Advisory Committee was comprised of representatives from the local communities, including liaisons from the local Planning Boards and a representative from the Orleans County Legislature. Discussions with he Committee resulted in the decision to include lands along Johnson Creek in the Village of Lyndonville, and representatives from the Village were added to the Committee. The efforts of the Waterfront Advisory Committee were supported by the New York State Department of State. This Committee met six times during the project to assist with the preparation of the LWRP. In addition, the Committee communicated throughout the project through emails and had the opportunity to comment on draft sections of the report circulated by the County.

To strengthen local commitment for the Town's planning efforts, the Waterfront Advisory Committee held two public meetings to provide local citizens an opportunity to comment on significant issues and opportunities in the waterfront revitalization area. These meetings were held on April 11, 2018, and August 30, 2018. Both meetings were held at the Town of Carlton Fire Recreation Hall.

The first Public Information Meeting was held to introduce the LWRP project to the public and provide an opportunity for residents and stakeholders to offer input on the issues and opportunities they felt were important in the waterfront area. This meeting was well attended, and numerous comments were gathered (see attached meeting summary).

The second Public Focus Meeting provided an opportunity for additional public comments on the draft LWRP policies, proposed projects and other actions proposed for implementing the LWRP (see

attached meeting summary). The information gathered at this meeting was utilized to further shape and finalize the LWRP findings and policies, as well as the proposed projects and implementation actions outlined in the program.

Prior to the adoption of the LWRP, each participating community held a public hearing on the action. These hearings provided the public with an opportunity to hear a presentation on the draft LWRP, as well as to provide the Town and Village Boards with final input on the proposed program.

7.2 Consultation

During the course of preparing the Kendall-Yates-Carlton-Lyndonville LWRP, the Waterfront Advisory Committee forwarded draft sections of the revised program to the Department of State for their review and comments. In addition, draft documents were distributed to a number of involved and interested agencies to gather their comments on program findings, policies and recommendations. The local agencies that were contacted for their input included the Orleans County Planning Department, the New York State Department of Environmental Conservation, and the adjoining Town of Somerset in Niagara County, to the west.

The draft LWRP was reviewed and accepted by the respective Town and Village Boards and forwarded to the New York State Department of State. The Department of State initiated a 60-day public review period for the draft program, pursuant to the requirements of the Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Article 42 of NYS Executive Law) and the State Environmental Quality Review Act. Copies of the draft LWRP were distributed to all potentially affected Federal, State and local agencies, as well as Orleans County and the Town of Somerset. Comments received on the draft document were reviewed by the Advisory Committee and the Department of State, and changes were made, as required, to reflect substantive comments. Thereafter, the final draft LWRP was adopted by individual Town and Village Boards, presented to the New York State Secretary of State for approval, and submitted to the National Oceanic and Atmospheric Administration for concurrence.