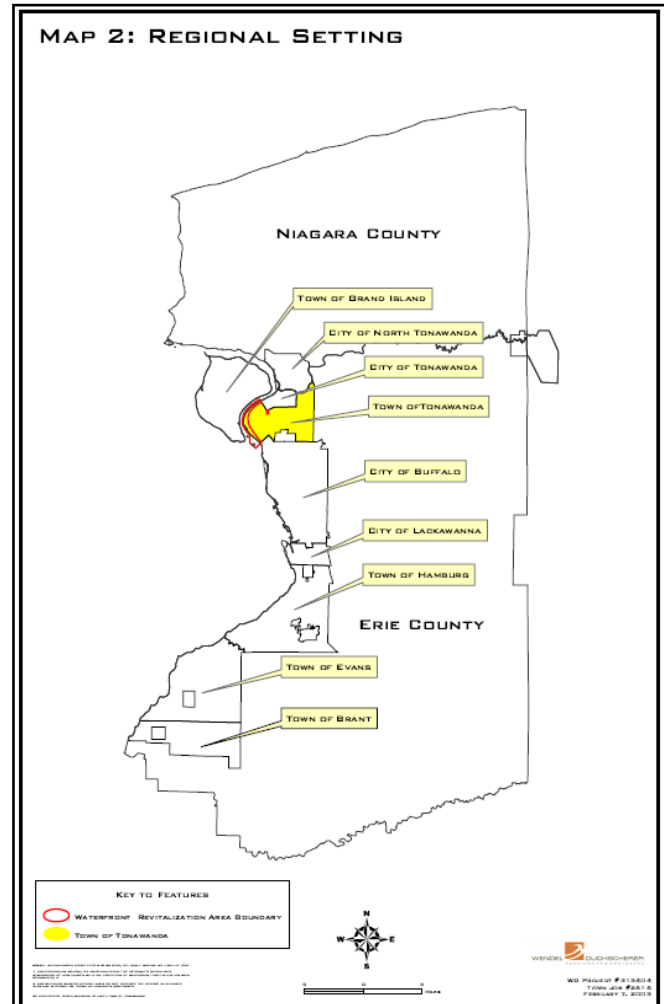


SECTION II - Inventory and Analysis

A. Regional Setting

The Town of Tonawanda is located in northwest Erie County immediately north of the City of Buffalo. It is bounded on the east by the Town of Amherst, on the north by the Cities of Tonawanda and North Tonawanda, and on the west by the Niagara River. The Town of Grand Island lies offshore and is connected to Tonawanda by the twin spans of the South Grand Island Bridges. Map 2 shows the Town within the region.

Tonawanda encompasses 21.4 square miles of land (including the 1.4 square mile Village of Kenmore, located in the south-central portion of the Town), and had a 1990 population of 82,464 (including 18,474 residents of the Village of Kenmore). During the 1940's and 1950's the Town experienced dramatic growth, increasing in population by 227% from 32,000 residents in 1940 to over 105,000 by 1960. A modest 2% growth during the 1960's resulted in a peak 1970 population of 107,282. Since then, the Town's population has declined by 15% to its present level. Since 1960, the Town has maintained a steady 9% to 10% share of the total population of Erie County.



Map 2 - Regional Setting

The eastern three-fourths of the Town is predominantly single-family residential in character with intensive commercial development occurring along major arterial highways such as Sheridan Drive (NY 324), Delaware Avenue (NY 384), Niagara Falls Boulevard (NY 62) and Elmwood Avenue. Delaware and Elmwood Avenues are major north-south thoroughfares and commuter routes to downtown Buffalo five miles south.

Tonawanda is directly served by two interstate highways: the New York State Thruway Niagara Section (I-190) and the Youngmann Memorial Highway (I-290). The Thruway lies in the industrial corridor occupying the western quarter of the Town and links Niagara Falls with downtown Buffalo and points

south and west. The Youngmann Highway is an east-west route through northern Tonawanda that links I-190 with the Thruway's main line (I-90) in Amherst and areas to the east.

The western quarter of Tonawanda, including its entire waterfront, has been used for industrial purposes since the early decades of the 1900's. The Niagara River and Erie Canal provided water for industrial processing, cooling, and transportation. Presently, firms such as General Motors, Dunlop, DuPont, FMC, and Tonawanda Coke continue to serve as major regional employers. According to the 1980 Census, 108,000 residents of Erie County were employed in manufacturing. Roughly 7,000 manufacturing jobs are located within the 2,900-acre industrial zone of western Tonawanda¹, which constitutes the largest single concentration of industry in Erie County outside the City of Buffalo.

B. Historic Setting

Settlement along the Tonawanda waterfront began after completion of the Erie Canal in 1825. Farming was practiced in the area from that time until well into the 1900's. The canal also fostered the establishment of inns and taverns along its banks; these uses continued until the filling of the original canal in the early 1900's.

At the turn of the century, most manufacturing was located in the City of Buffalo. As expansion of the industrial base continued, land became increasingly scarce and expensive. Electrical power was provided from Niagara Falls directly to Buffalo through the Town of Tonawanda. The combination of available land in large holdings, electricity and water for industrial processing combined to attract manufacturing to the Town's waterfront as early as 1904. At that time the Wickwire-Spences Steel complex, now referred to as the Roblin Industrial Park Complex, was begun (it opened in 1907), and rail service was extended into the area. This was followed by construction of the Huntley Power Plant in 1916 and the Dunlop Tire complex in 1920. As industry expanded, farming declined².

Also, the expansion of industry led to an increased demand for residential areas to accommodate employees. The Riverview neighborhood (an extension of the well-established Riverside community in the City of Buffalo) expanded, and a residential enclave developed immediately east of the Huntley plant along Sawyer Avenue. These neighborhoods continue to exist today.

Transportation improvements, such as the paving of River Road and construction of Sheridan Drive, continued to provide momentum for industrialization. The construction of the Grand Island Bridge and Boulevard in 1935 opened the northern half of the waterfront area for development. At the same time, ferry service to Grand Island, which was provided at the foot of Sheridan Drive, ceased. The area near the ferry terminal was occupied by small commercial establishments which have since disappeared. Much of the land was cleared to accommodate the Town's water treatment plant and, eventually, the Town's waterfront park and boat launch.

¹ Clifford Carlsen and Maryanne LePage, "25 Largest Employers, Business First of Buffalo: Top 25 Lists, 1984-85", Dec. 23, 1985, p. 25-B.

² Conversation with John Percy, Town of Tonawanda Historian, Jan. 25, 1986.

Other major industrial facilities such as Chevrolet, Western Electric, and the Frontier Oil Refinery complex continued to be developed during the 1930's and 1940's. The presence of large-scale industry was enormously beneficial to the Town's fiscal well-being. Partly because of this, the Town became extremely attractive for residents (due to favorable residential tax rates), and Tonawanda experienced rapid growth in the first wave of post-war suburbanization. The Town's residential areas were fully-developed by 1970, with the Town's population exceeding 107,000³. Table 1 presents population figures for the Town during the 1940 and 1990 periods.

The construction of the New York State Thruway in the mid 1950's and of the Youngmann Highway during the 1960's once again greatly increased accessibility to the Tonawanda waterfront area. Truck terminals were attracted by the convenience of access to the interstate system, as transportation shifted from a rail to a highway emphasis.

A significant consequence of industrialization has been the use of large areas of land for industrial waste disposal. Such activities have been occurring since the earliest days of industrial development. Today, the waterfront and immediate surroundings are dotted with nearly 30 waste sites, some of which remain active today⁴. These sites contain a wide range of deposits, including several toxic substances. The precise extent and composition of hazardous waste deposits have not yet been completely documented, and continue to undergo analysis.

During the 1960's and 1970's the pace of industrial expansion in Tonawanda declined in a manner common to the Buffalo metropolitan area at large. Industrial obsolescence and overall market factors have resulted in frequent abandonment and underutilization of facilities. Lately, the general public has developed a heightened awareness of the untapped potential of the waterfront for recreation. Beginning in the mid-1970's, attention throughout the Buffalo area has increasingly focused on this potential. In the Town of Tonawanda, efforts to increase public use of the waterfront began in the 1970's with construction of the Town's waterfront park and boat launch at the foot of Sheridan Drive. Segments of the Erie County Riverwalk are currently in varying stages of design and construction. A section of this hike-and-bikeway between the Grand Island Bridges and Erie County's Isle View Park opened in May 1988. Eventually, about one half of the Town's shoreline will be accessible for public recreation at a scale never before possible.

The waterfront is in transition. While industrial uses are still dominant, efforts are underway to diversify activities in the area. This process of change, begun twenty-five years ago, is likely to continue for some time to come. The Town's response to and intervention in this process will ultimately determine the future of this critically important area.

³ U.S. Bureau of the Census, U.S. Census of Population, 1990

⁴ U.S. Environmental Protection Agency, "Preliminary Evaluation of Chemical Migration to Groundwater and the Niagara River from Selected Waste Disposal Sites", EPA-905/4-85-001, March 1985, pp. 210-284; and NYS Department of Environmental Conservation Division of Solid and Hazardous Waste, Inactive Hazardous Waste Disposal Sites in New York State, Appendix Volume 3, January 1984, pp. 3-11.

C. Inventory and Analysis: Methodology

The purpose of the Inventory and Analysis is to describe existing conditions along the waterfront, as well as opportunities and constraints to future growth. In the case of the Town of Tonawanda, the waterfront zone includes the area shown on [Map 1](#). However, activities within this zone are affected by land uses in adjacent areas. Patterns of land ownership, physical development, circulation, and environmental factors beyond the zone boundaries directly influence activities within the corridor to a large degree.

The study area encompasses 1,131 acres within the designated waterfront zone, as well as 1,800 additional acres of land to the east. This area, whose eastern boundary follows Kenmore Avenue, the Niagara Thruway (I-90), the Youngmann Highway (I-290) and Two Mile Creek, includes most of the industrialized area of western Tonawanda.

Table 1: Town of Tonawanda Population: 1940-1990

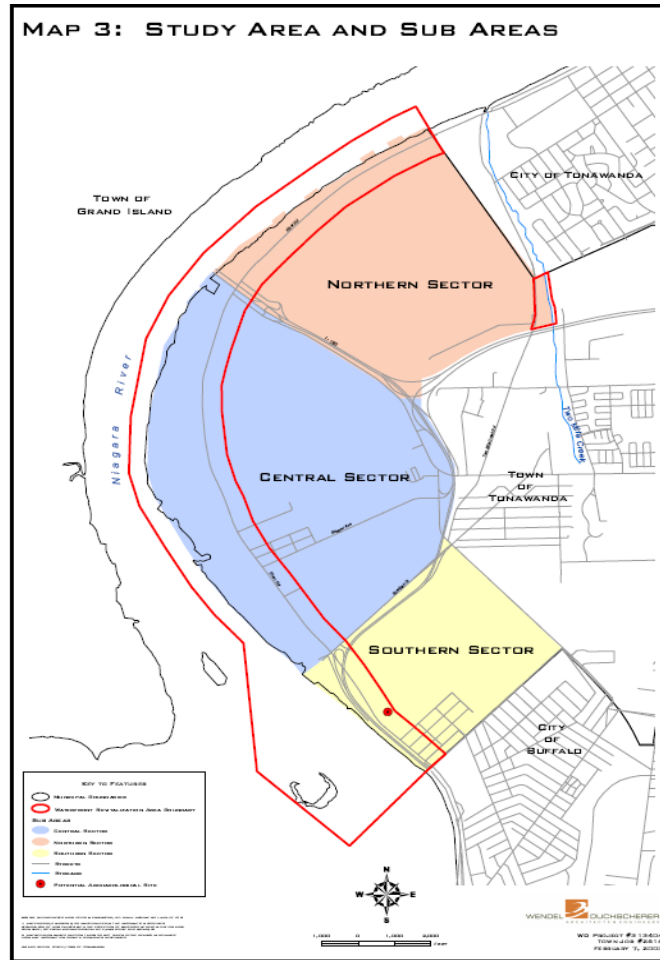
Year	Population	% Change
1940	32,155	
1950	55,270	+71.9
1960	105,261	+90.4
1970	107,282	1.9
1980	91,269	-14.9
1990	82,464	- 9.0

Source: The U.S. Census of Population

Within this area, information has been assembled pertaining to land use, parcel size and ownership, circulation, soils, water quality, air quality, flooding, topography, wetlands, erosion, fish and wildlife habitats, industrial waste sites, archaeological sites, zoning, utilities, major capital investments and aesthetics. The information has been analyzed to determine short and long-term development constraints, as well as opportunities for change. The waterfront area has further been divided into three subareas, each with distinctive characteristics. These include:

1. **The Southern Sector (Sheridan Drive South)**, encompassing the residential/ commercial area adjacent to the City of Buffalo in the southernmost portion of the Town's waterfront area (and also including Strawberry Island). It contains 172 acres and 0.4 miles of river frontage.
2. **The Central Sector**, including the area between Sheridan Drive and the Grand Island Bridges encompasses 729 acres and extends along 2.5 miles of shoreline.
3. **The Northern Sector**, encompassing the remaining waterfront area north of the Grand Island Bridges. It includes 262 acres and 1.3 miles of river frontage. The area also includes the 19 acre Two Mile Creek corridor illustrated in [Map 1](#).

[Map 3](#) locates these subareas, as well as the entire study area.



Map 3 – Study areas and subareas

D. Demographic and Social Characteristics

Residential development within the study area is limited to the Southern Sector and the Sawyer-Kaufman section of the Central Sector. According to 1980 Census figures, these areas have a combined population of 1,104 (966 in the Southern Sector and 138 in Sawyer-Kaufman). In addition, a mobile home park located within the study area at Sawyer Avenue and Grand Island Boulevard (roughly 3/4 mile east of the waterfront area) contains an additional 80 residents.

The above is included in Census Tract 84, which extends from the Niagara River east to Military Road (about one mile east of the study area boundary).

E. Land Use

Map 4 displays existing land use along the waterfront. Specific subarea descriptions are presented below.

1. **Southern Sector:** This portion of the waterfront area encompasses 172 acres, including the 11-acre Strawberry Island. The horseshoe-shaped island is vacant land owned by New York State.

Its area fluctuates depending upon River levels. The island is wooded, low, and subject to considerable erosion. Between 1912 and 1950, a sand-and-gravel company used the island as a source of raw materials. At that time the island exceeded 40 acre⁵. Excavations of the northern portions eventually produced the present horseshoe configuration. The island remains popular with area boaters and fishermen as an informal rest area and picnic grounds. Immediately offshore from the State-owned Strawberry Island is the Town's water supply intake.

The mainland portion of the Southern Sector includes two sections: the shoreline along Aqua Lane at the foot of Sheridan Drive, and the inland section from River Road east. These are separated by the Niagara Thruway (I-190), which follows the course of the Old Erie Canal. River Road runs along the crest of a 20-foot high bluff above the Thruway. Views from the road to the Niagara River are significant.

The eastern side of the four-block section of River Road from the City of Buffalo north to Edgar Avenue is commercial. The neighborhood immediately east along Vulcan Street, Heutter, Roswell, Riverdale, and Edgar Avenues is a stable residential community of older homes. The Town Boys' and Girls' Club at the northeast corner of Riverdale Avenue and Grover Place provides recreation facilities.

Two large industrial complexes - DuPont and Chevrolet-Pontiac Canada Group (CPC) - are located between the residential community and Sheridan Drive to the north. Both are heavily dependent on industrial cooling and processing water.

The shoreline along Aqua Lane includes the Town's Aqua Park and boat launch, as well as the municipal water treatment plant. Privately-maintained water intakes for the nearby Chevrolet and DuPont plants are also located here. Commercial uses include a restaurant and marina. DuPont also maintains a boathouse for employees. The area exhibits high scenic potential.

2. **Central Sector:** Much of the subarea is occupied by major industrial facilities and utilities, including the Erie County Water Authority pumping plant, a Town of Tonawanda sanitary sewer lift station, the massive Huntley Steam generating plant of the Niagara Mohawk Power Corporation (which occupies 120 acres of land), two private marinas, the Erie County Water Authority Treatment Plant (occupying 88 acres), the Roblin Industrial Park complex, a sand-and-gravel processor/ distributor, a vacant 55-acre (former NMPC waste site) parcel known as the "Cherry Farm" owned by Niagara Mohawk, a truck terminal, a large private marina, and the Grand Island Bridges.

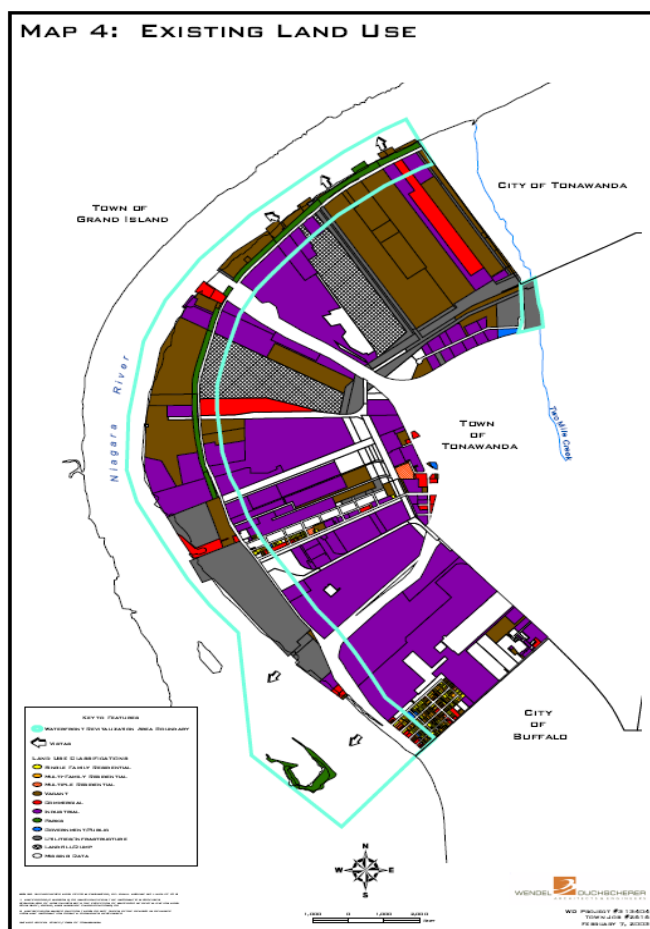
To the east of River Road, Dunlop Tire owns a vacant 25-acre area (a former waste disposal site) at the northeast corner of River Road and Sheridan Drive. The Dunlop manufacturing complex is located immediately east of this site.

⁵ Erie County Department of Environment and Planning, Preliminary Report: Strawberry Island, Nov. 13, 1985, pp.8-9.

The eastern side of River Road north to the Grand Island Bridges is entirely occupied by industrial uses such as FMC Industrial Chemical Group, Tonawanda Coke, tank farms, scrapyards, truck terminals, rail lines, power lines, and the Niagara Mohawk Fly-Ash Disposal site. At the northeast corner of Sawyer Avenue and River Road lies the small residential enclave known as the Sawyer-Kaufman community. It is surrounded by heavy industry.

Facilities within the waterfront area display considerable variety. Utilities such as the Huntley Power Generating Plant, Erie County Water Authority Plant, and the municipal water treatment plants are water-dependent. The Huntley plant occasionally receives shipments of coal by barge and relies on the River for industrial cooling. Other docking facilities at the Roblin complex and the Ashland Refinery are rarely used.

Elsewhere, other uses such as scrapyards and warehousing facilities have existed in the area for decades without any direct requirement for locating in proximity to the waterfront.



Map 4 – Existing Land Use

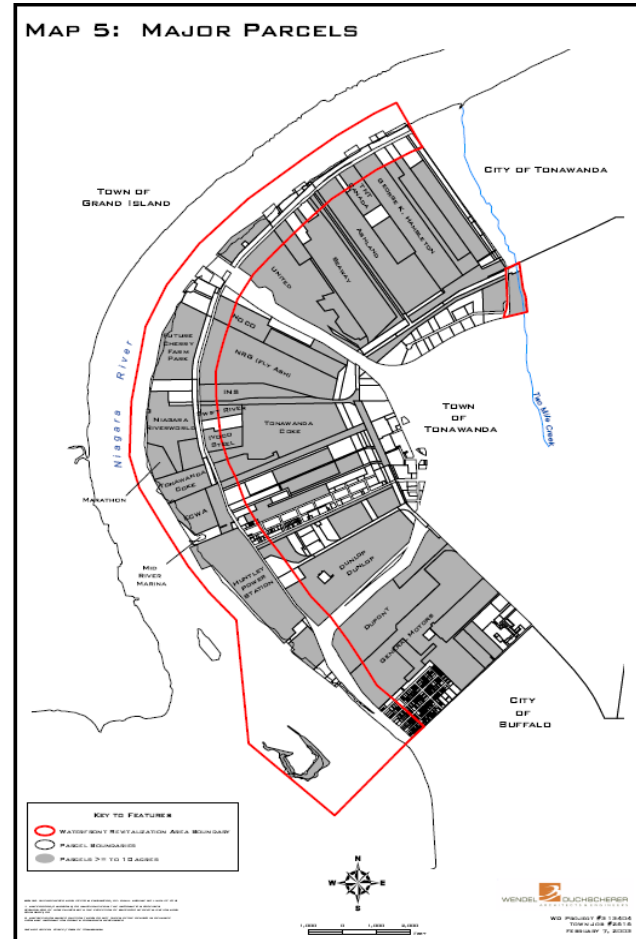
3. **Northern Sector:** Immediately north of the Grand Island Bridges east of River Road is the 140-acre Ashland Oil Refinery complex. Petroleum refining ceased in 1984, but tanks are still used as storage and distribution facilities for area service stations. Further north lays the Seaway Industrial Park, a major active landfill of regional importance. Several truck terminals and a small tank farm are in the vicinity. Roughly 65 acres of land north of the Seaway facility within the waterfront area are vacant. Other sections of the Northern Sector subarea west of River Road include the Ashland docking facilities, utility transmission lines and the County's Isle View Park. The park includes sections of the Riverwalk and a boat launch ramp.

Two-Mile Creek corridor is also part of the Northern Section. It contains 19 acres, evenly split between vacant brushland and the Town's sewage treatment plant. The corridor links with the City of Tonawanda's waterfront revitalization area to provide a potential open space link between the Niagara River and Sheridan Park.

F. Inventory of Major Parcels

As part of the analysis of the Tonawanda waterfront, all privately-owned parcels 10 acres or greater in size have been identified. Such parcels represent areas with the most opportunity for change, as well as the greatest barriers to development. Major development activities usually require the assembly of large contiguous areas of land. A preponderance of large parcels in an area might ease acquisition procedures, particularly if such parcels are underutilized. Conversely, large parcels which include relatively stable uses are typically less likely to become available for redevelopment and consequently become significant long-term factors to be considered in formulating and upgrading plans and policies for the waterfront.

Of the 845 acres of privately-owned land within the waterfront, roughly 733 lay within parcels of 10 acres or more. This figure represents 87% of all privately-owned lands within the waterfront, and 63% of all waterfront lands. The acreage is contained in 28 parcels, representing an average parcel size of 26 acres, while actual parcel sizes range from 10 to over 170 acres. Many of the largest parcels extend well beyond the limits of the waterfront area east of River Road. In some cases, their property lines are located over one mile away. Maps 5 and 6 present information on these parcels.



Map 5 – Major Parcels

Table 2: Major Private Parcels

#	Owner	Approx. Size within study area (acres)	Land Use	Specific Use	Water Dependent	Major Investment
1	General Motors	32	Industry	Chevrolet	Yes	Yes (\$360M)
2	Dupont	30	Industry	Dupont, Buffalo Film Division	Yes	No
3	Dunlop	33	Industry	Dunlop Tire	(\$100M)	Yes (\$1000M)

#	Owner	Approx. Size within study area (acres)	Land Use	Specific Use	Water Dependent	Major Investment
4	FMC	14	Industry	Industrial Chemical	No	No
5	Noco Energy	8	Industry	Tank farm	No	No
6	Ashland	10	Industry	Tank Farm	No	No
7	Niagara Mohawk	5	Industry	Transmission Lines	No	No
8	Rouse Breihan, Inc.	12	Industry	Formerly Allied Chemicals (closed)	No	No
9	Erie County Industrial Development Agency (ECIDA)	6	Industry	Tonawanda Coke (Limited Operation)	No	No
10	NY Wire Mills	17	Industry	Cable Manufacturer	No	No
11		10				
12	Carmen Pariso	11	Industry	Trucking for Niagara	No	No
13	INS Equipment	5	Industry	Scrapyard	No	No
14	Niagara Mohawk	96	Landfill & Vacant	Fly Ash Site & "Cherry Farm"	No	No
15	ECIDA c/o Newman Oil	17	Industry	Tank Farm	No	No
16	Ashland	65	Industry	Tank Farm	No	No
17	Agway Petroleum	10	Industry	Tank Farm	No	No
18	Seaway Industrial park	28	Landfill	Landfill	No	No
19	Ashland	9	Vacant	Vacant	No	No
20	TNT Canada	13	Vacant	Vacant	No	No
21	George K. Hambleton	18	Vacant	Vacant	No	No
22	Neil Irving Norry et. al.	7	Industry	Tank Farm	No	No
23	Kenneth & Patricia Lefler	5	Vacant	Vacant	No	No
24	Inter-Mountain Terminal	10	Light Industrial	Truck Terminal	No	No
25	Niagara Mohawk	120	Utility	Huntley plant	Yes	No
26	ECIDA	26	Industrial	Tank Farm	No	No
27	Marathon Petroleum	14	Industrial	Tank farm	No	No
28	ECIDA	62	Industrial	Robin Complex	No	No

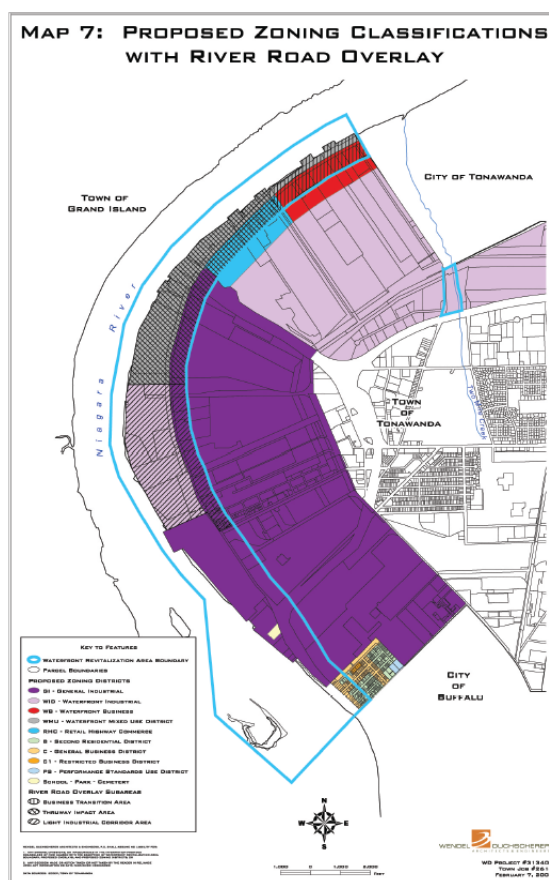
G. Zoning

The Waterfront Mixed Use District (W-1) is established on the shore of the Niagara River. District regulations permit a variety of public and private water-related park and recreational facilities. Additional specially permitted uses include marinas, boatyards, hotels, retail stores and restaurants, and other water-related commercial activities, as well as some residential uses.

The Waterfront Commercial Use District (W-2) is established on the land side of River Road. With site plan review, this district allows public and private water-related park and recreational facilities. All other uses, including boatyards, hotels, automotive service stations and other commercial and business uses, require a special permit.

The Waterfront Residential District (W-R) is established to allow medium to high density residential development along the river's edge. District regulations allow single family dwellings and public recreation with site plan review. Multi-family dwellings and townhouses are allowed by special permit. All structures must be setback a minimum of 75 feet from the crest overlooking the river shoreline. All uses should be designed to allow pedestrian access to and along the crest.

The Waterfront Industrial District (W-I) is established on the east side of River Road. The only permitted use in the District is public and private parklands and trails. Specially permitted uses include boat storage, offices, light manufacturing wholesale and warehousing, and other business and professional uses. Heavy industry, junk yards, truck terminals, landfills, and a variety of other uses are prohibited.



Map 7 – Zoning Classifications

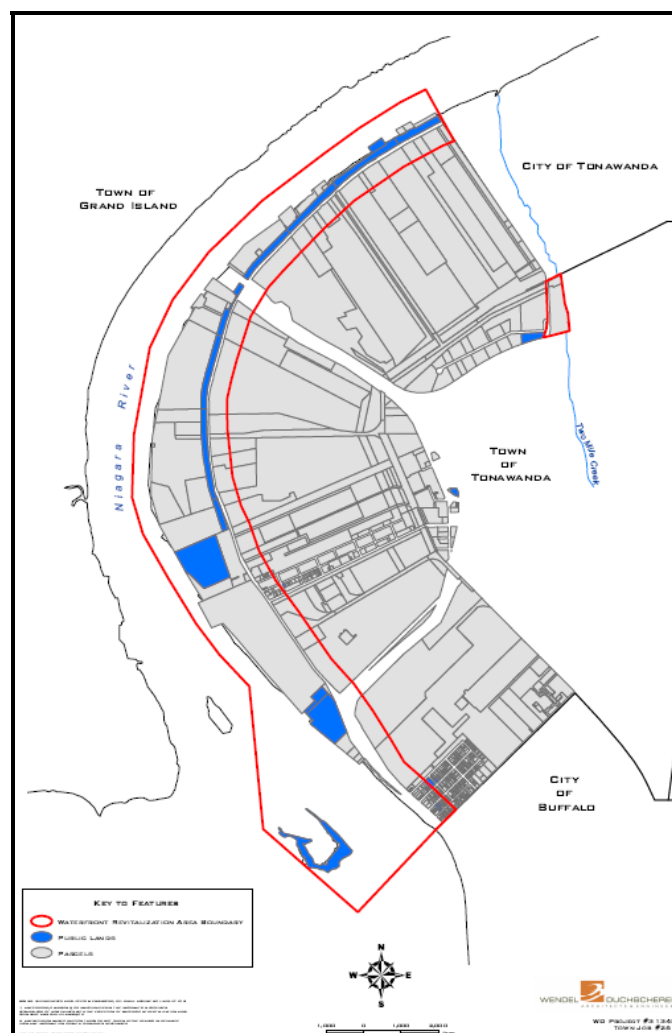
H. Land Ownership

Of the 1,045 acres within the Town's waterfront area not occupied by transportation facilities, roughly 200 acres (19%) are publicly-owned. The Town of Tonawanda owns 51 acres, including the water and sewage treatment plants and lift stations, the boat launch, and the waterfront park. Erie County owns 58 acres, much of which is included within the former Erie Canal right-of-way. The Erie County Water Authority owns 91 acres at its treatment plant and pump facility. New York State owns Strawberry Island, which is approximately 11 acres. The remaining 845 acres of waterfront land (81% of the total) is privately owned.

Approximately 32% of the river frontage is controlled by public agencies. Public ownership extends over an 8,400 foot length (including 1,600 feet used for the Niagara Thruway and Grand Island Bridges). In addition, Erie County owns 56% of the western frontage of River Road (13,000 feet out of a total highway length of 23,000 feet). This was the old Erie Canal bed.

Table 3: Land Ownership

Ownership	Acreage	% of Total
Town-owned	40	4.4
Other Public	150	12.8
Private	845	72.7
Transportation	118	10.1
TOTAL	1,163	100.0



Map 6 - Public Lands

I. Vacancy Analysis

Nine privately-owned parcels in the Tonawanda waterfront area are vacant, comprising 117 acres, and 57% of all vacant waterfront land. Of these parcels, five exceed 10 acres in size and include 98 acres in total. The three remaining parcels range from 1 to just under 10 acres.

Significant vacant public parcels include Erie County's 25-acre undeveloped section of Isle View Park, the 6 acres of NYS Thruway Authority land under the Grand Island Bridges, the 11-acre Strawberry Island (owned by New York State), and approximately 12 acres in the Two Mile Creek Corridor. These 42 acres of vacant public land represent 20% of all vacant land within the waterfront area.

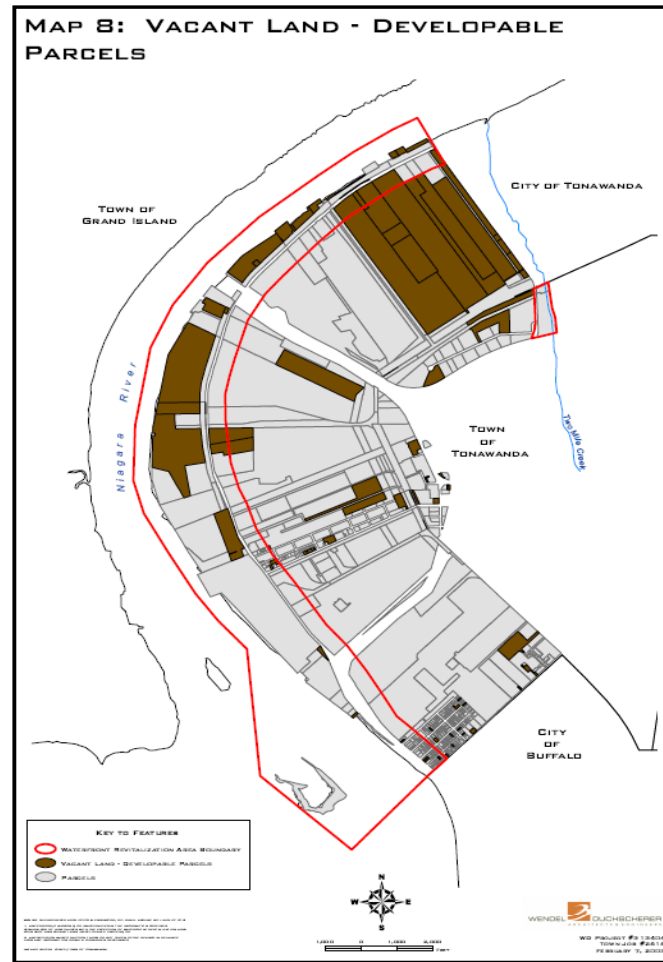
The remaining 47 acres of vacant land are scattered among four partially developed parcels, including the Dunlop complex, the Erie County Water Authority Treatment Plant, and the Ashland refinery complex. A small vacant area is also located at the southern end of Aqua Lane. Forty-six of these 47 acres are privately owned.

Table 4: Vacant Land: Tabular Summary

Parcel No.	Owner	Size (Acres)
1	Town of Tonawanda	11
2	Dunlop	25
3	Placid Harbor Marina	2
4	Erie County Water Authority	2
5	INS Equipment	9.6
6	Niagara Mohawk	55
7	Erie County	7
8	NYS Thruway Authority	6
9	Ashland	5
10	Erie County	2
11	Ashland	11
12	Ashland	91.4
13	Goetz Oil	2
14	TNT Canada	19.9
15	George K. Hambleton	80.9
16	Kenneth & Patricia Lefler	37.3
17	Town of Tonawanda	12
18	Erie County	25
19	Niagara Mohawk	7

Approximately two-thirds (172 acres) of the 206 acres of vacant land is located in the northern half of the waterfront area. The "Cherry Farm" parcel accounts for 55 acres. Another 46 acres are located just

south of the City of Tonawanda boundary. In fact, these vacant lands extend inland for a considerable distance and include a total of 314 acres.



Map 8 – Vacant Land

Table 4 and [Map 8](#) present detailed information on vacant land in the Tonawanda waterfront area.

J. Environmental Factors

A series of environmental characteristics has been identified and evaluated within the waterfront area. These include topography, soils, flooding and erosion, water quality, air quality, wetlands, habitats, waste sites, and aesthetics.

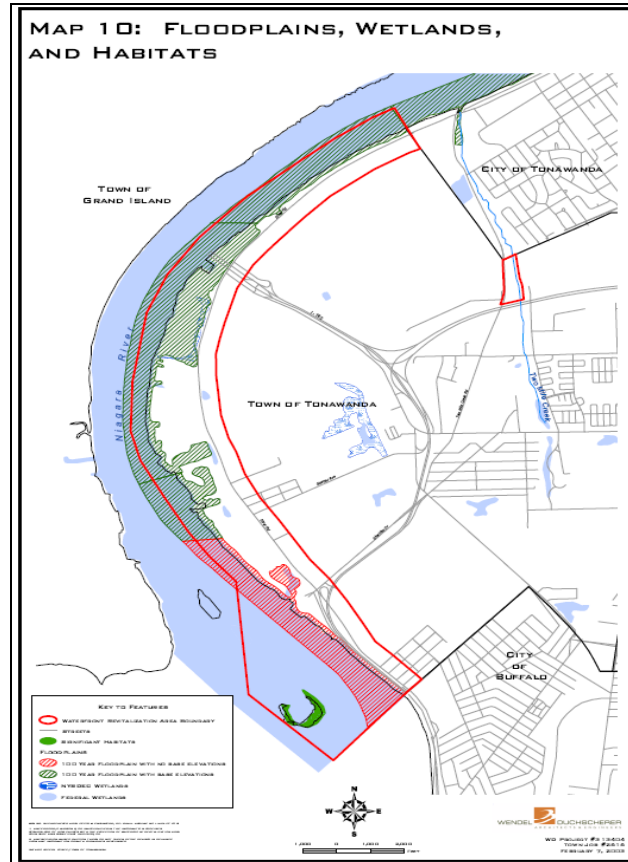
1. **Topography:** Most of the terrain in the waterfront is level, exhibiting a gradual slope towards the riverbank. The bank is generally 5 to 8 feet above normal river levels. Bluffs along River Road's western edge in the Southern and Northern Sectors are approximately 20 feet in height. The Two Mile Creek corridor experiences an approximate 20% slope from Two Mile Creek Road to the stream itself.

[illegible]

3. **Flooding:** The northernmost two miles of the Town's shoreline west of River Road lies within the Flood Hazard Area delineated by the Federal Emergency Management Agency. Floodplains also are found along several minor drainage facilities between the Roblin Complex and Sheridan Drive, as well as along areas immediately adjacent to the shoreline south to the City of Buffalo. No floodplains are found east of River Road.

Section II

question the accuracy of the special flood hazard area designation. Over the long term, the Cherry Farm has development potential. Thus, the Town should consult with the Federal Emergency Management Agency to have the site reexamined relative to its flooding potential. Map 10 indicates the extent of flood hazard areas.

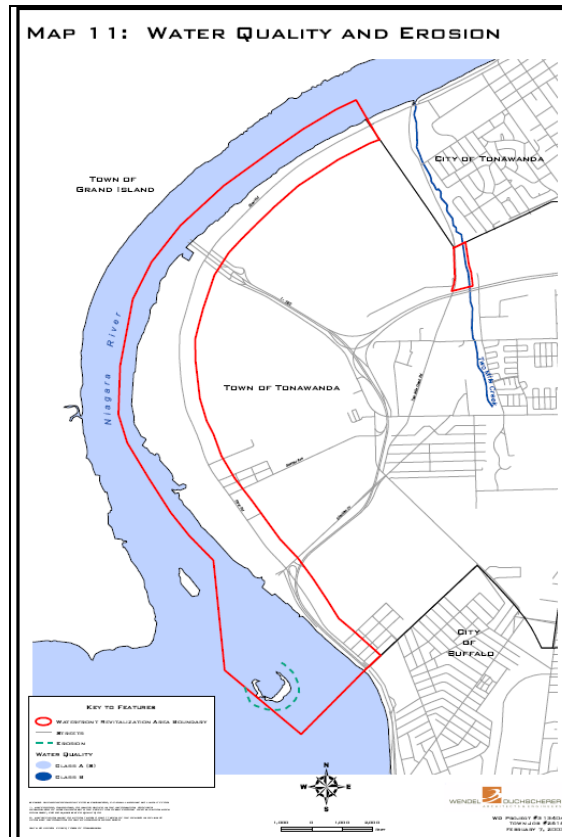


Map 10 – Floodplains, Wetlands, and Habitats

4. **Erosion:** Erosion along the Niagara River shoreline of the Town is not a major problem, and no erosion hazard areas have been designated pursuant to the Coastal Erosion Hazard Area Act (Environmental Conservation Law, Article 34).

Severe erosion is, however, experienced at Strawberry Island. Records indicate that in 1912 the island had an area of 204 acres⁶. Between 1912 and 1950, the island was extensively excavated as a source of sand and gravel. Aerial photos of 1951 show a remaining area of roughly 25 acres on the island. Since that time, the size of Strawberry Island has continued to diminish due to erosion. Its present size is 11 acres. Map 11 notes the location of areas subject to severe erosion.

⁶ Erie County Department of Environment and Planning, OP. CIT.



Map 11 – Water Quality and Erosion

5. **Water Quality:** The Niagara River is classified as "Class A – Special Waters" subject to water quality standards listed in Part 700, Section 702.1 of the Rules and Regulations of Title 6 of the New York State Environmental Conservation Law. The river is a major source of drinking water.

Two Mile Creek is designated a "Class B" stream as defined in Part 700 of the State Environmental Conservation Law. The stream is suitable for all uses except as a source of water for drinking, culinary, or food processing purposes. Map 11 shows protected streams and water quality classifications.

6. **Air Quality:** The Town's waterfront area is in compliance with all State and federal standards governing air quality⁷⁷.
7. **Wetlands:** A 13-acre Class II wetland (BW-8) is located west of River Road in the old Erie Canal right-of-way, roughly 1,500 to 4,000 feet south of the Grand Island Bridges. The wetland is classified as Class II by the NYS Department of Environmental Conservation's Final Freshwater

⁷⁷ NYS Department of Environmental Conservation, New York State Air Quality Implementation Plan, Erie and Niagara Counties, March 1979.

Wetlands Map for Erie County, filed on 9/10/86. The wetland is adjacent to the 55-acre "Cherry Farm" parcel on River Road. [Map 10](#) shows wetlands greater than 12.4 acres⁸.

8. **Fish and Wildlife Habitats:** Strawberry Island - Motor Island Shallows and the surrounding 400 acres of river area has been designated as a significant coastal fish and wildlife habitat, pursuant to Executive Law, Article 42. Approximately 200 acres are in the Town of Tonawanda. The significant habitat designation indicates that the area warrants maximum protection from all public and private intrusions that might hinder its continuing function as a significant habitat. Strawberry Island is owned by New York State.

Strawberry Island - Motor Island Shallows is located in the upper Niagara River, roughly bounded by Strawberry Island, Motor Island, and the southern tip of Grand Island. The fish and wildlife habitat is an extensive shallow shoal area (generally less than 6 feet deep below mean low water), containing beds of submerging aquatic vegetation (e.g., wild celery), and patches of emergent wetland vegetation in shoreline areas. Much of this island appears to be eroding as a result of ice scour, high water levels, and direct removal by dredging. Dredging was responsible for much of the reduction in surface area of the island from approximately 200 acres in 1912 to 40 acres in 1948. Strawberry Island is a horseshoe-shaped island which is now 20 acres in size. There is a stand of native willow trees on the south end and a lagoon and marsh on the north side. The island functions as the geologic dividing point of the east and west branches of the Niagara River. The underwater portion of Strawberry Island - Motor Island Shallows is owned by the NYS Office of General Services and as of 1987, the upland portion of Strawberry Island is also owned by the State. Most of the adjacent land area on Grand Island is within Beaver Island State Park, which is extensively developed for recreational use⁹.

[Map 10](#) shows significant habitats.

9. **Waste Disposal Sites:** Fourteen waste disposal sites are located within the Town of Tonawanda waterfront area, two of which are active¹⁰ - the Seaway Industrial Park, which received municipal and industrial wastes from throughout western New York; and the Niagara Mohawk disposal site, which receives fly ash from the coal-fired Huntley power plant.

The Seaway facility occupies approximately 100 acres of land on the east side of River Road about one-half mile north of the Grand Island Bridges. It has been given a Class 2 priority by the NYS Department of Environmental Conservation, indicating that it presents a significant threat to the public health or environment and requires corrective action. The site is continually being upgraded with a leachate collection system to meet current standards. Collected leachate is piped to the Town sewer plant for treatment. Portions of the site contain radioactive uranium

⁸ NYS Department of Environmental Conservation, Wetland Map Series, Map No. BW-6 and TW-30, Revised 1985.

⁹ NYS Department of Environmental Conservation, "Coastal Fish and Wildlife Habitat Rating Form: Strawberry Island - Motor Island Shallows," pp.2-3 (undated).

¹⁰ U.S. Environmental Protection Agency and NYS Department of Environmental Conservation Division of Solid and Hazardous Wastes, OP.CIT.

tailings from the Manhattan project and PCB's have been detected in some surface water samples.

The Niagara Mohawk disposal site occupies nearly 100 acres of land east of River Road, roughly one-quarter mile south of the Grand Island Bridges. The site is in compliance with current regulations.

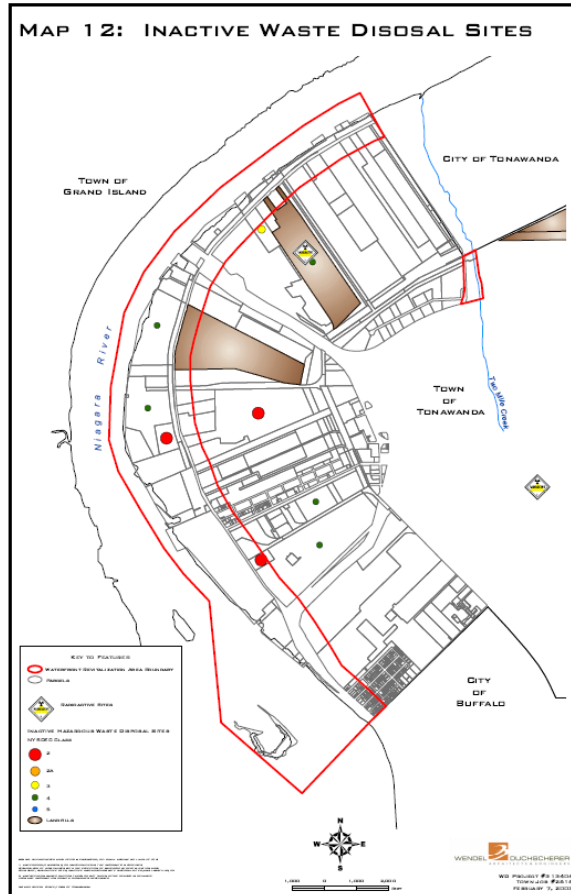
Twelve other inactive waste sites are located within the waterfront area. The presence of hazardous wastes has been confirmed at eight. One site, the 55-acre "Cherry Farm," has been given a Class 2 priority rating by the NYS Department of Environmental Conservation, while the INS Equipment site has been given a Class 3 ranking, indicating no significant threat to health or environment. The remaining hazardous waste sites' potential significance as environmental threats has not yet been determined.

Table 5: Waste Disposal Sites

#	Site Name/Owner	Status A=Active C=Closed (Year Closed)	DEC Class
1	Allied Chemical-Special Chemical Division	C (1960)	3
2	Ashland Oil Company	C (1982)	2a
3	Dunlop Tire & Rubber	C (1970)	2a
4		C	2a
5	FMC-Chemical Division	C (1976)	2a
6	INS Equipment Site	C (1978)	3
7	Polymer Applications	C	2a
8	Tonawanda Coke	C (1979)	3
9		C (1978)	2a
10	Roblin Steel	C (1976)	3
11	Ashland Petroleum	C (1982)	2a
12	Niagara Mohawk "Cherry Farm"	C	2
13	Seaway/Niagara Landfill Inc.	A	2
14	Niagara Mohawk Fly Ash Disposal Site	A	2
DEC Class as Follows: 2: Significant threat to health and/or environment 2a: Significance undetermined 3: No significant threat			

The "Cherry Farm" lies adjacent to the Niagara River about one-quarter mile south of the Grand Island Bridges. It was used as a waste site for prolonged periods until the 1970's. It includes foundry sand, fly ash and slag materials that have been capped with 6 inches of clay. Fill material reach depths of 20 feet. The site has been rededicated and is being redeveloped as a recreation

facility of regional significance. A Class I wetland borders the site on three sides. Samples from the hazardous waste site indicated the presence of phenol tars, chlorinated benzines, lead, chlorinated organics, and 22 priority pollutants¹¹.



Map 12 – Inactive Waste Disposal Sites

- 10. Historic/Archaeological Sites:** No sites or structures are listed, or are eligible for listing, on the National Register of Historic Places within the waterfront area.

An archaeological site (UB 235) has been identified as lying on the mainland opposite Strawberry Island. Its potential significance is unknown and it may presently be located beneath the Chevrolet Plant¹². Reference should be made to [Map 3](#) for the site's location.

- 11. Aesthetics:** Opportunities to view the Niagara River are limited to areas south of Aqua Land Park, north of the Ashland Refinery, Isle View Park Extension, and in the immediate vicinity of

¹¹ Engineering-Science, Inc. and Dames & Moore, Engineering Investigations and Evaluations at Inactive Hazardous Waste Disposal Sites Niagara Mohawk Cherry Farm, Erie County, New York: Phase II Report, June 1985.

¹² Correspondence from Ben A. Nelson, Director, Archaeological Survey, SUNY at Buffalo, to Erie County Department of Environment and Planning, Feb. 19, 1986.

the Grand Island Bridges. The remaining shoreline is blocked from view by industrial development and woodland.

In the southern portion of the waterfront area, river views along River Road and I-190 are significant, encompassing Grand Island, Strawberry Island, downtown Buffalo, and the Canadian shore.

At the Grand Island Bridges, vistas are degraded by poor landscaping and bridge abutments. North of the Ashland refinery, overgrown slopes and overhead power lines diminish the area's aesthetic appeal. Dominant features of the landscape include the Huntley Station (with its smokestacks and transmission lines), the Grand Island Bridges, oil storage tanks, and the Roblin Industrial Park. Although attempts to lessen the visual impact of heavy concentrations of industry have been made through the installation of landscaped buffers (notably at the water plants and Huntley Station), overall aesthetic quality remains poor.

K. Utilities

The Town's sewage treatment plant on Two Mile Creek Road has a design capacity of 70 million gallons per day (M.D.) and is currently operating at a level of approximately 13 M.D. Trunk lines, 15 inches to 18 inches in size, parallel most of the west side of River Road; widely scattered service lines branch off to the east side of River Road between Sheridan Drive and the City of Tonawanda. Several branch lines provide service to the properties on the west side of River Road.

The Town operates a water treatment plant servicing the entire municipality. The plant's design capacity is 30 M.D. and current utilization is approximately 18 M.D. The intake lies just offshore of Strawberry Island.

Stormwater drainage in the waterfront area occurs through a combination of natural swales and piped storm drain systems.

Both electrical and natural gas services are available in the area. Supplies can readily accommodate new development in the area¹³.

The Town's solid waste is disposed of at the Occidental Waste to Energy Plant in the City of Niagara Falls, New York. The Town generates 150 tons per day and the disposal facility is operating at approximately 81% capacity. Since there is unlikely to be significant growth along the waterfront in the short term, the solid waste capacity is sufficient.

L. Circulation and Access

River Road is the primary highway serving the Tonawanda waterfront. The road is a four-lane State highway (NY 266) and is considered a minor arterial within the Buffalo urban area highway system. xvi River Road extends south (as Niagara Street) to downtown Buffalo. Traffic volumes vary on its three

¹³ The Saratoga Associates and Economic Research Associates, Comprehensive Development Plans and Strategy for expansion of Fire Tower Industrial Park, September 1985, pp. 47-49.

distinct sections within the Town: between the City of Buffalo and Sheridan Drive, 9,300 average daily trips (ADT's) occur; between Sheridan Drive and the Grand Island Bridges daily volumes of 6,950 occur; north of the bridges daily volumes average 9,900.^{xvii} The segment between Sheridan Drive and the Grand Island Bridges has one railway overpass. Abutments of this overpass are those of the previously existing overpass and act to constrict the width of River Road and serve to eliminate shoulders.

Grand Island Boulevard, Sawyer Avenue, Sheridan Drive, and Vulcan Street are east-west roads connecting River Road with the remainder of the Town. State highways are Grand Island Boulevard (NY 324, a two-lane minor arterial with an ADT of 1,930) and Sheridan Drive (NY 325, a four-lane collector with an ADT of 7, 540)¹⁴. Sawyer Avenue, a County highway is a two-lane local street with an ADT of 5,400¹⁵. Vulcan Street, a two-lane local street, runs directly on the Tonawanda-Buffalo boundary and is maintained by both municipalities. In addition, the Town maintains several minor local streets which are residential in character in the Niagara View area and in the vicinity of Sawyer Avenue and River Road.

The Niagara Section of the New York Thruway (I-190) serves the Tonawanda waterfront with interchanges at Sheridan Drive and River Road/Grand Island Boulevard. The four-lane interstate highway continues north over the Grand Island Bridges through Niagara Falls and on to Canada. To the south, the highway passes through downtown Buffalo connecting with I-90. Daily volumes in the Tonawanda waterfront range from 36,100 to 54,400¹⁶.

Public transportation is provided in the area by the Niagara Frontier Transportation Authority. Route No. 40 provides service along River Road between Buffalo and the Grand Island Bridges. The route connects downtown Buffalo with Niagara Falls via Grand Island. Hourly service is generally available mornings through evenings from Monday to Saturday.

Routes No. 5 and 30 serve the Southern Sector. Route 5 proceeds north from downtown Buffalo via Niagara and Tonawanda Streets, terminating at the intersection of Vulcan and Tonawanda Streets. Route 30 is an east-west route along Kenmore Avenue which also terminates at Vulcan and Tonawanda Streets. Frequencies on each route are approximately 30 minutes, with regular service provided Monday through Saturday.

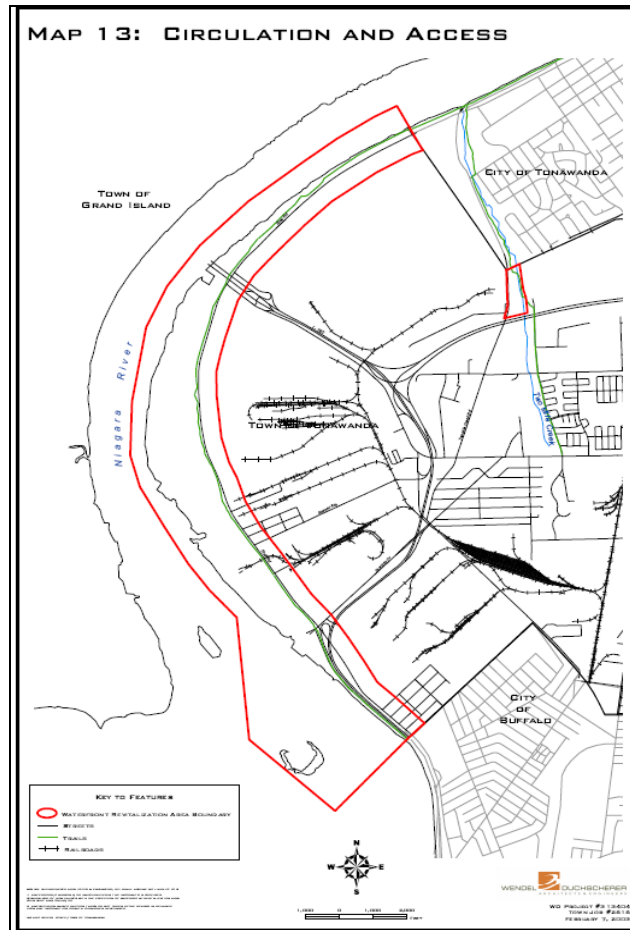
An extension of Route No. 30 (No. 30S) continues north along River Road to Sheridan Drive during morning and evening weekday rush hours and serves the Chevrolet, DuPont, and Dunlop complexes.

Completion of the Erie County Riverwalk will provide a safe and scenic bicycle route between downtown Buffalo and the City of Tonawanda. The route parallels River Road. For a further explanation see Section I, subsection XIV (A.5). [Map 13](#) illustrates the circulation system.

¹⁴ IBID.

¹⁵ Erie County Department of Environment and Planning, "Capital Assets and Facilities Management Program," 1986.

¹⁶ NYSDOT, OP.CIT.



Map 13 – Circulation and Access

M. Major Recent and Proposed Improvements

Several substantial public and private capital investments have occurred during the past five years which represent a major commitment to the future of the Town's waterfront. In addition, plans for future investment have been developed which will ensure the long-term stability of several major industries in the area. These are summarized below.

1. Recent Improvements

- a. **River Road Resurfacing:** NYS Department of Transportation -sponsored project consists of resurfacing and safety improvements to River Road between the Grand Island Bridges and the City of Tonawanda boundary. The \$583,000 project was completed in 1983.
- b. **South Grand Island Bridge (north span) Reconstruction:** NYS Thruway Authority project consisting of bridge deck reconstruction, repair of supporting piers, and painting. This \$5,100,000 project was completed in 1985.

- c. **Chevrolet-Pontiac-Canada Group, Inc.:** A program of ongoing modernization to production facilities and equipment has resulted in an investment of \$200 million in private funds since 1980.
- d. **Erie County Riverwalk (River Road Section):** The Riverwalk is a hike-and-bike path along the Niagara River that will eventually link downtown Buffalo with the Barge Canal in the City of Tonawanda. Several major sections have been completed. In the Town of Tonawanda, construction of a four mile section between the Grand Island Bridges and Barge Canal in the City of Tonawanda was completed in 1988. Project cost was \$850,000.
- e. **Anchor Marina:** Major renovations to this marina in the Niagara View subarea include new above-water docks and other ancillary improvements
- f. **Cherry Farm Park:** This 57-acre former hazardous waste site is being redeveloped as a park. The site has been remediated, design plans have been completed through an Environmental Protection Fund grant awarded to the Town in 1995 by the NYS Department of State, and completion of site improvements is anticipated by 2000. When completed, the park will be of regional significance.
- g. **Fire Tower Industrial Park:** A 62-acre Town sponsored project immediately northeast of the I-190/I-290 interchange. Begun in 1980, the Town has invested \$300,000 to construct roads and utilities to service this previously vacant and inaccessible area. The park is now 90% occupied. Twelve light industrial buildings have been constructed, and private investment totals \$12,000,000.
- h. **Uniland Development** has constructed five new buildings in an industrial and office park complex at Kenmore Avenue and Vulcan Street. Private investment has been roughly \$6,000,000. The firm has also constructed 8 new buildings in the 22-acre Interstate Commerce Center at a cost of \$12 million.
- i. **O-Cel-O Corp.** on Sawyer Avenue has invested \$20 million to upgrade production facilities since 1984.
- j. **Erie County Riverwalk (Erie Canal Section):** The 3.5 mile section of the Riverwalk between the City of Buffalo and the Grand Island Bridges was completion during the early 1990's at an estimated cost of \$2,300,000.
- k. **I-190 Rehabilitation:** The NYS Thruway Authority has implemented major rehabilitation of I-190 through the Town of Tonawanda during 1990. Resurfacing, safety improvements and reconstruction where necessary, are estimated to cost \$10,500,000.
- l. **Fire Tower Industrial Park Expansion:** During 1985 the Town undertook a long range study regarding the potential for expanding Fire Tower Industrial Park. The conceptual plan prepared for this study recommended eventual acquisition and development of

over 200 acres of vacant land between the existing Industrial Park and River Road. If implemented, this project would require the expenditure of \$1,250,000 for land acquisition, and \$4 million for roads, utilities, and site work.

N. Summary

The Tonawanda waterfront is in transition. Although the area has historically been dominated by heavy industry, a gradual awareness of the waterfront's value as a recreation resource has been steadily growing. It seems likely that increased recreation coupled with a steady decline of marginal industrial activities will continue in the foreseeable future.

Portions of the Tonawanda waterfront exhibit signs of industrial obsolescence. Drastic underutilization or outright abandonment of industrial facilities is common. This is not a local phenomenon, however. Underutilized industrial waterfront property in Tonawanda must be viewed in the context of all industrial waterfront land in the Buffalo metropolitan area. The City of Buffalo is grappling with the same issue of underutilization as the Town, only on a more massive scale. Two square miles of waterfront land and infrastructure abandoned by Bethlehem Steel in the City of Lackawanna are at the initial stages of revitalization.

Market forces have produced an extensive local surplus of waterfront industrial property while simultaneously creating a diminishing demand for their industrial reuse. Concurrently, a local demand for waterfront recreation exceeds the local supply of recreation facilities. Heavy utilization of nearly all water-related parkland throughout Erie County is readily apparent. The recreation potential of the Town of Tonawanda waterfront has yet to be fully realized. Three private marinas, the Town boat launch and its waterfront park, and development of the Cherry Farm Park currently respond to some of this recreation demand. The Riverwalk project, as well as the Isle View Park extensions, provide valuable fishing, cycling, and scenic opportunities.

While heavy industry may be declining along the Tonawanda waterfront, several important exceptions to this trend are evident. Recent and ongoing investments in the Chevrolet and Dunlop complexes seem to virtually guarantee their long-term presence in the area. The success of the Town's Fire Tower Industrial Park and the expansion of several other nearby industries also suggest that some level of industrialization will be present in the waterfront area for years to come. Water-dependent uses, which include the Niagara Mohawk Huntley Station now embarking on a \$13 million expansion, as well as the municipal and county water treatment plants, are also certain of long-term stability. All these facilities will strongly influence the course of future development.

Hazardous waste sites constitute a major factor affecting development. Approximately 200 acres in scattered locations have been used for the disposal of industrial wastes. The extent of potential hazards to the environment and public health has to be fully documented. Remedial work will be necessary at a number of locations prior to undertaking any redevelopment activities.

Any expansion of the BFI landfill will continue the high volume truck traffic along River Road, eliminate redevelopment of the Ashland site for less intensive uses, and continue the negative image many

residents have of the Town shoreline. Finally, development of a portion of the Ashland property as a federal radioactive waste disposal site will result in a variety of negative impacts similar to those caused by any BFI expansion.

The challenges confronting Tonawanda's efforts to fully capitalize upon its waterfront resources are formidable. Nevertheless, the potential to transform significant portions of the waterfront into an attractive and productive local and regional asset remains viable given a long-term commitment of joint public and private actions ¹⁷to undertake necessary steps.

¹⁷ Horizons Waterfront Commission and Saratoga Associates, Horizons Waterfront Action Plan, adopted January 29, 1992.