

ANDREW M. CUOMO
GOVERNOR



JOE MARTENS
COMMISSIONER

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-1010

JUL 26 2012

Ms. Judith Enck
Regional Administrator
United States Environmental Protection Agency - Region II
290 Broadway
New York, NY 10007-1866

Dear Ms. Enck:

The New York State Department of Environmental Conservation is submitting for your review an application for the designation of a Vessel Waste No-Discharge Zone for the waters of the New York State portion of Lake Erie. I fully support this effort and have enclosed the application and the necessary certification to the Environmental Protection Agency under Section 312(f)(3) of the Clean Water Act for your consideration of the designation of this Vessel Waste No-Discharge Zone.

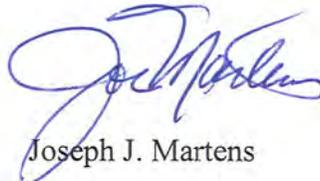
This petition seeks the designation of a Vessel Waste No-Discharge Zone for the waters of Lake Erie within the New York State boundary, stretching from the Pennsylvania-New York State boundary to include the upper Niagara River to the Niagara Falls. The proposed No Discharge Zone encompasses approximately 593 square miles and 84 linear shoreline miles, including the navigable portions of the Upper Niagara River and numerous other tributaries and harbors, embayments of the Lake including Barcelona Harbor, Dunkirk Harbor and Buffalo Outer Harbor, and other formally designated habitats and waterways of local, state, and national significance.

The ability to meet New York State surface water quality standards and fully support aquatic and recreational uses in the waterways of Lake Erie is a problem that has been well documented in environmental assessments. The designation of a Vessel Waste No-Discharge Zone would better enable local municipalities and the state to protect the valuable natural, recreational and historic resources of the Lake, continuing a comprehensive program to reduce or eliminate non-point sources of pollution entering its waters. The designation also implements the federally-approved New York State Clean Vessel Act Plan.

The collaborating New York State agencies have prepared the enclosed application. I respectfully request that you concur with its findings as to the adequacy of available pumpout facilities in the area, so that the New York State waters of Lake Erie may be designated as a Vessel Waste No-Discharge Zone pursuant to the Clean Water Act and New York State Regulations.

Thank you for your help and assistance on this very important matter. If you have any questions, please contact Jeff Myers, Director of the Water Quality Assessment Section in the Division of Water at (518) 402-8179.

Sincerely,

A handwritten signature in blue ink, appearing to read "Joseph J. Martens". The signature is fluid and cursive, with the first name "Joseph" being the most prominent part.

Joseph J. Martens

Enclosures

cc: Jeff Myers, Division of Water, NYSDEC
Jennifer Congdon, NYSEFC

bc: Commissioner
Jim Tierney
Mark Klotz
Jeff Myers
Carin Spreitzer
Jeff Myers
BWAM file
CCU

**VESSEL WASTE NO DISCHARGE ZONE DESIGNATION PETITION
FOR
LAKE ERIE, NEW YORK STATE PORTION**



GREATER PROTECTION AND ENHANCEMENT CERTIFICATION

PETITION FOR A DETERMINATION REGARDING A NO-DISCHARGE ZONE

**Prepared by the New York State Department of Environmental Conservation, the
New York State Environmental Facilities Corporation, and the New York State
Department of State**

2012

Cover Photo: Buffalo Harbor, Jim Clayton, NYSDEC

Contents

1. Introduction.....	5
1.1 <i>The Great Lakes</i>	5
1.2 <i>Lake Erie</i>	6
1.3 <i>No Discharge Zones in New York State</i>	9
2. Greater Protection and Enhancement Certification	9
2.1 <i>Lake Erie Lake Management Plan (LaMP)</i>	10
2.2 <i>New York State Significant Coastal Fish and Wildlife Habitats</i>	10
2.3 <i>Recreational Resources</i>	11
2.4 <i>Drinking Water Supply</i>	11
2.5 <i>Water Quality Assessment</i>	12
2.6 <i>Greater Protection and Enhancement Certification</i>	16
3. Vessel Population and Usage in Proposed Area	18
4. Vessel Waste Discharge Facility Information	19
4.1 <i>Existing Recreational Pumpouts and Determination of Pumpout to Boat Ratios</i>	19
4.2 <i>Commercial Vessel Pumpouts</i>	21
4.4 <i>Summary</i>	22
5. Other Information	22
5.1 <i>Enforcement</i>	22
5.2 <i>Public Education/Information Plan</i>	23

Appendix 1: NYS Significant Coastal Fish and Wildlife Habitats on Lake Erie Shoreline

Appendix 2: Recreational Sites on NYS Lake Erie Shoreline

Appendix 3: Marina Data Sheets

1. Introduction

The Great Lakes – the largest group of freshwater lakes on Earth – are true wonders of the world. An important part of the physical landscape and cultural heritage of North America, the Great Lakes hold 95% of the United States’ surface fresh water. Shared with Canada, these “freshwater seas” boast more than 10,000 miles of magnificent coastline and 30,000 islands. They provide drinking water, transportation corridors, and power sources. The region’s four-season climate, uniquely influenced by the Great Lakes, supports boating, fishing, diving, beach enjoyment and other forms of recreation.

Lake Erie is the smallest of the Great Lakes. It has the smallest volume and the second smallest in surface area (18,960 km²/7,340 square miles). It is also the shallowest, with depths that range from an approximate average of 7.4 meters (24 ft) in the western basin, to 25 meters (82 feet) in the deeper eastern basin. The New York State Department of Environmental Conservation (DEC) developed this petition in collaboration with New York State Department of State (DOS) and the New York State Environmental Facilities Corporation (EFC) in order to establish a vessel waste No Discharge Zone (NDZ) on the open waters, tributaries, harbors and embayments of New York State’s portion of Lake Erie.

Most of the existing NDZs in New York State have been based on a State determination that the waterbody requires greater environmental protection, and an EPA finding that adequate pump-out facilities are available. NDZs, however, may also be established for waters that are drinking water intake zones based simply on the need to safeguard human health, without further need to demonstrate adequate pumpout facilities. In 1996, this latter type of NDZ, known as a 312(f)(4)(B) NDZ, was granted for Class A (Water Supply) waters of the Hudson River.

A 312(f)(4)(B) NDZ designation for drinking water intake zones is the appropriate type of NDZ for the vast majority of the Lake Erie waters included in this petition. However, in order to address the few areas that are not Class A (including Barcelona Harbor, Dunkirk Harbor and the Black Rock Canal), and to provide further basis for the action, this petition includes additional information on Lake resources, vessel traffic, and vessel pumpout facilities. A Certification of the Need for Greater Protection and Enhancement of Lake Erie waters is also included.

1.1 The Great Lakes

The Great Lakes region is graced with wide swaths of forest and wilderness areas, rich agricultural land, hundreds of tributaries, thousands of smaller lakes, and extensive mineral deposits. Its landscape contains sand dunes, coastal marshes, rocky shorelines, lake plain prairies, savannas, forests, fens, wetlands and other features that are globally unique, or best represented within the Great Lakes basin. For example, the world’s largest freshwater dunes line the shores of Lake Michigan.

The region’s glacial history and the influence of the lakes themselves create unique conditions that support a wealth of biological diversity, including over 200 globally rare plants and animals and more than 40 species that are found nowhere else in the world. Rare species making their

home in the Great Lakes region include the world's last known population of the white catspaw pearly mussel, the copper redhorse fish and the Kirtland's warbler. The Great Lakes also support a world-class fishery, with an estimated 180 species of native fish, including small- and large-mouth bass, muskellunge, northern pike, lake herring, whitefish, walleye and lake trout.

According to the Brookings Institute, if the Great Lakes region were its own nation, it would be eligible for membership in the G8 Economic Conference, providing transportation for raw materials and finished goods; fresh water for our industries; drinking water for our communities; and recreation for the basin's more than 30 million citizens. The 4.3 million recreational boats registered in the eight Great Lakes states generate nearly \$16 billion in spending on boats and boating activities in a single year. That spending directly supports 107,000 jobs, a figure that grows to nearly 250,000 when secondary impacts are taken into consideration.

1.2 Lake Erie

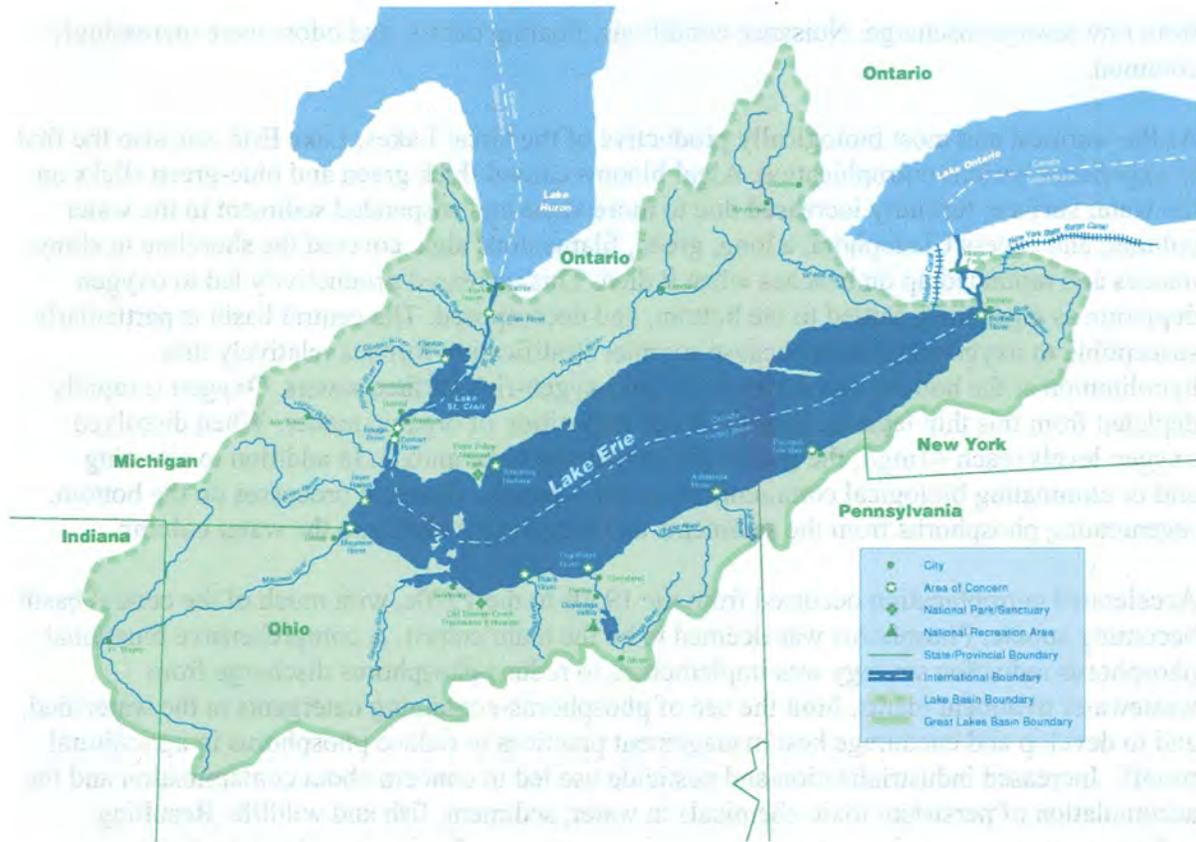
Erie is the smallest of the Great Lakes by volume and second smallest by surface area. As the shallowest of the Great Lakes, it warms quickly in the spring and summer, and cools quickly in the fall. During long, cold winters, a large percentage of Lake Erie is covered with ice and it often freezes over completely. Conversely, in warmer years there may be no ice at all on. This shallowness and the warmer temperatures that result, make Lake Erie the most biologically productive of the Great Lakes.

Lake Erie comprises three natural basins. The western basin is very shallow, with an average depth of 7.4 m (24 ft.) and a maximum depth of only 19 m (62 ft.). The central basin is relatively uniform in depth, with an average depth of 18.3 m (60 ft.) and a maximum depth of 25 m (82 ft.). The eastern basin is the deepest of the three, with an average depth of 24 m (80 ft.) and a maximum depth of 64 m (210 ft.). The central and eastern basins thermally stratify every year, but stratification in the shallow western basin is rare and very brief when it does occur. Stratification affects the Lake's physical, biological, and chemical dynamics. The difference in the physical characteristics of each basin causes them to function as virtually three separate lakes.

Eighty percent of Lake Erie's total inflow comes from the Detroit River, 11% from precipitation, and the remainder from the other tributaries flowing directly into the lake from Michigan, Ohio, Pennsylvania, New York and Ontario.¹ The Niagara River is the Lake's main outflow.

The Lake Erie watershed is home to approximately one-third of the total population of the Great Lakes basin – 11.6 million people (10 million U.S. and 1.6 million Canadian), including 17 metropolitan areas, each with more than 50,000 residents. The majority, 11 million, receive their drinking water from the Lake. Of all the Great Lakes, Lake Erie is exposed to the greatest stress from urbanization, industrialization and agriculture. Because the Lake Erie basin supports the

¹ Bolsenga, S.J., and C.E. Herdendorf [eds]. 1993. *Lake Erie and Lake St. Clair Handbook*. Wayne State University Press, Detroit, Michigan.



largest population, it surpasses all the other Great Lakes in the amount of effluent received from sewage treatment plants.²

Lake Erie is also the Great Lake most subject to sediment loading, which stems from a variety of sources, including intensive agriculture, particularly in southwest Ontario and northwest Ohio; the Detroit River, which carries sediment from the actively eroding shoreline of southeastern Lake Huron and Lake St. Clair; and long stretches of actively eroding Lake Erie shoreline. The western basin is generally the most turbid, and much of its sediment load eventually moves into the central and eastern basins. Suspended sediment has profoundly influenced the ecology of the western basin and most of the Lake's tributaries. Much of the Lake bottom is covered with fine sediment particles that are easily disturbed when the shallow lake is stirred by winds.

Over the years, the issues of concern to Lake Erie have evolved. The most important issues and the timeframe during which they appeared are illustrated in Figure 2.2. Commercial overfishing, pollution and habitat destruction began to take a toll in the late 1800s, and popular commercial fish populations plummeted. Many of the drinking water intakes for the most populated areas were moved far offshore to avoid epidemics of waterborne diseases, such as typhoid, resulting

² Dolan, D.M. 1993. Point Source Loading of Phosphorus to Lake Erie. *J. Great Lakes Res.* 19:212-223.

from raw sewage discharge. Nuisance conditions, floating debris, and odors were increasingly common.

As the warmest and most biologically productive of the Great Lakes, Lake Erie was also the first to experience serious eutrophication. Algal blooms caused thick green and blue-green slicks on the water surface; turbidity increased due to more algae and suspended sediment in the water column; and excess *Cladophora*, a long, green, filamentous alga, covered the shoreline in slimy masses and mounded up on beaches when it died. This increased productivity led to oxygen depletion as algae died, settled to the bottom, and decomposed. The central basin is particularly susceptible to oxygen depletion because summer stratification forms a relatively thin hypolimnion at the bottom that is isolated from oxygen-rich surface waters. Oxygen is rapidly depleted from this thin layer as a result of decomposition of organic matter. When dissolved oxygen levels reach $<1\text{mg/l}$, the waters are considered to be anoxic. In addition to stressing and/or eliminating biological communities, anoxia changes chemical processes on the bottom, regenerating phosphorus from the sediments and recycling it back into the water column.

Accelerated eutrophication occurred from the 1950s to the 1970s, with much of the central basin becoming anoxic. Phosphorus was deemed to be the main culprit. A comprehensive binational phosphorus reduction strategy was implemented to reduce phosphorus discharge from wastewater treatment plants, limit the use of phosphorus-containing detergents in the watershed, and to develop and encourage best management practices to reduce phosphorus in agricultural runoff. Increased industrialization and pesticide use led to concern about contamination and the accumulation of persistent toxic chemicals in water, sediment, fish and wildlife. Resulting pollution control regulations, improvements in treatment technologies, adoption of stringent water quality standards, bans on production and use of certain chemicals, waste minimization, and pollution prevention have together greatly reduced the direct discharge of contaminants. The lingering effects of these historic discharges, however, such as contaminated sediments and fish consumption advisories raised further concerns in the late 1970s that continue to this day.

By the mid 1980s and through the 1990s, the phosphorus levels in Lake Erie reached those necessary to eliminate eutrophication. Over the last decade, however, concentrations of total phosphorus have once again been on the increase. While this trend is not currently statistically significant, it is of great practical concern. It represents a reversal of decades of successful management for this key driver of lake health. Most hypotheses implicate zebra and quagga mussels for changing the nutrient dynamics in the nearshore areas. The decreased phosphorus levels in the water column and increased lakebed nutrient concentrations, due to zebra and quagga mussel activities, are commonly referred to as the nearshore shunt. The mussels are processing and recycling nutrients in the shallower nearshore areas where they reside, effectively keeping much of the in-lake and incoming phosphorus in the nearshore zone.

In addition to in-lake cycling, the amount of phosphorus entering the Lake from more frequent and intense storm events has also increased over the last few years. The phenomenon of altered storm event intensity and timing may be a particularly important driver of phosphorus concentrations in the lake. Monitoring over the last decade is also showing a significant increase in the dissolved (bioavailable) phosphorus component of nutrient loads from major tributaries in Ohio.

Coincident with the increasing dissolved phosphorus loads and nearshore nutrient concentrations, *Cladophora* growth has been increasing, *Microcystis* blooms are occurring in the western and central basins, and a new species of cyanobacteria – *Lyngbya wollei* – experienced a population explosion near the mouth of the Maumee River in 2006. Hypoxia/anoxia in the central basin remains a concern.

Changes in land use, development, and the shore structure construction have, together, significantly altered the original habitat available along the Lake Erie shoreline. Many of the wetlands have been drained, filled, or altered so that they no longer function naturally. Shore structures have inhibited the natural flow of beach building materials along the shoreline and, consequently, affected the natural shore habitat.

1.3 No Discharge Zones in New York State

No Discharge Zone designations are a key component of a larger strategy for protecting all coastal waters of New York State. In 2010, New York State and the United States Environmental Protection Agency Region 2 (EPA) announced a joint initiative to establish NDZs in the remaining coastal waters and navigable connecting waterways of the State. At that time, efforts were underway to establish NDZs for the entire length of the New York State Canal System and the New York State portion of Long Island Sound (since established). Additional waters since designated as NDZs include Jamaica Bay and Lake Ontario. The remaining waters without a NDZ designation include New York Harbor waters, Block Island Sound and easternmost Long Island South Shore, and the waters of the Lake Erie and Saint Lawrence River. Approval of this petition would fill a notable gap in NDZ coverage in the state and would advance the goal of NDZs in all coastal New York waterways by eliminating discharge of boating wastes in all waters of New York State.

Existing No Discharge Zones in New York State (date established)

Lake George (1976)
Lake Champlain (1976)
Hudson River, water intakes (1995)
Mamaroneck Harbor (1997)
Peconic Waters, East Hampton (1999)
Huntington-Northport Bay Complex (2000)
Port Jefferson Complex (2001)
Peconic Estuary (2002)
Hudson River Estuary (2003)
Hempstead Harbor (2008)
Oyster Bay/Cold Spring Harbor (2008)
South Shore Estuary Reserve (2009)
New York State Canal System (2010)
Long Island Sound, NY portion (2011)
Jamaica Bay (2011)
Lake Ontario (2011)

2. Greater Protection and Enhancement Certification

Microbial pathogens, one of the harmful elements of raw sewage, degrade water quality and pose direct threats to human health. Wastes treated by marine sanitation devices and discharged by vessels to surface water do not pose the same level of pathogen risk as raw sewage, but they contain chemical additives, such as formaldehyde, phenols, and chlorine, all of which threaten public health and the marine environment.

According to the federal Clean Vessel Act of 1992, “sewage discharged by recreational vessels because of an inadequate number of pumpouts is a substantial contributor to localized degradation of water quality in the United States.” In 1995, as a follow up to the federal law,

New York State enacted legislation to encourage NDZs, in order to “allow the State and those municipalities participating in this program to improve the cleanliness of their regional waters constituting no-discharge zones.” While the discharge of untreated sewage wastes from vessels is prohibited within all of the State's waters, in the absence of an NDZ designation, federal law allows the discharge of wastes treated by federally approved marine sanitation devices. Conferring the protections of an NDZ on the waters of Lake Erie will augment the myriad efforts that towns, cities, and the state are currently making to curb pollution from other sources.

2.1 Lake Erie Lake Management Plan (LaMP)

The Great Lakes Water Quality Agreement of 1978 (GLWQA) committed the U.S. and Canada to jointly address Great Lakes water quality issues. The purpose of the GLWQA is to “restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem.”

Under the agreement, both nations are required to develop and implement Lakewide Management Plans (LaMPs) and Remedial Action Plans (RAPs) for Areas of Concern (AOCs) in consultation with State and Provincial Governments. The LaMPs identify critical pollutants that impair beneficial uses, and develop recommendations to restore these uses. The GLWQA also requires that LaMPs “embody a systematic and comprehensive ecosystem approach to restoring and protecting beneficial uses...they are to serve as an important step toward virtual elimination of persistent toxic substances...” The objectives and actions of the LaMPs focus on addressing fourteen specific beneficial use markers, including consumption, tainting (taste) and deformities in fish and wildlife, fish and wildlife populations and reproduction, benthic communities, dredging activities, algal growth and aesthetics, water supply protection, recreational water use, industrial and agricultural water use, and habitat protection and restoration. In addition, the LaMP remains mindful of emerging issues that may need to be adapted into the LaMP management scheme.

The Lake Erie LaMP continues to focus on measuring ecosystem health, teasing out the stressors responsible for impairment, and evaluating the effectiveness of existing programs by monitoring ecosystem response. As a management plan, the LaMP defines what is needed to restore Lake Erie's chemical, physical and biological integrity. It further defines agency commitments to those actions. Although Environment Canada and EPA are the lead agencies for the LaMP, it takes an array of federal, local, state and provincial agencies and stakeholders to successfully design and implement the Lake Erie LaMP.

2.2 New York State Significant Coastal Fish and Wildlife Habitats

Significant Coastal Fish and Wildlife Habitats, designated under the Waterfront Revitalization of Coastal Areas and Inland Waterways Act, are defined as geographic areas of statewide significance. Designation by DOS, upon recommendation by DEC, is based on an analysis of whether the area:

- Is essential to the survival of a large portion of a particular fish or wildlife population
- Supports populations of species which are endangered, threatened, or of special concern
- Supports populations having significant commercial, recreational, or educational value
- Exemplifies a habitat type which is not commonly found in the state or coastal region

There are 18 designated Significant Coastal Fish and Wildlife Habitats in the two counties that comprise New York's Lake Erie shoreline (see Appendix 1), including:

- Cattaraugus Creek
- Dunkirk Harbor
- Buckhorn Island Wetlands
- Grand Island Tributaries

2.3 Recreational Resources

The New York State shoreline and waters of Lake Erie host a variety of recreational resources. These facilities are a source of revenue to the regional economy, bringing people to the shoreline where they patronize local businesses. Such facilities also stir an appreciation for the natural resources of Lake Erie. Embayments and marinas also offer opportunities for recreational boaters to set out for day trips, again stimulating the local economy. People often fish and swim from their boats.

The municipal, county and state recreational facilities on Lake Erie in Erie and Chautauqua counties provide access to and support for water-dependent activities such as recreational boating, swimming, fishing and nature observation, and contribute to the livability of communities along Lake Erie (see Appendix 2 for a summary list). Of particular note are:

- Niagara Reservation, Buckhorn Island and Evangola state parks, and Tiff Nature Preserve in Erie County
- Lake Erie State Park in Chautauqua County

2.4 Drinking Water Supply

Virtually all of Lake Erie is classified by New York State as Class A waters. As such, the best uses of these waters are for drinking, culinary or food processing purposes; recreation; and fishing. Class A waters "shall be suitable for fish, shellfish, and wildlife propagation and survival," and, when subject to accepted treatment for drinking water supplies, compliant with New York State Department of Health (DOH) drinking water safety standards.

There are currently six New York municipal and community water supplies – including Buffalo and Erie County – that draw water from Lake Erie. They serve approximately 275,000 people in New York State. Beyond New York State, Lake Erie provides water for a total of 11 million people and is part of the Great Lakes System, which contains 95% of the fresh surface water in the United States and is the largest single reservoir on earth. The importance of protecting this water source, and all of its component lakes and tributaries, cannot be overstated.

No Discharge Zones and Drinking Water

Section 312 of the Clean Water Act sets out three ways to establish an NDZ. In the first, a state determines that a waterbody requires greater environmental protection and EPA finds that adequate pump-out facilities are available. This type of NDZ is commonly known as a 312(f)(3) NDZ, a reference to the applicable section of the federal Clean Water Act. Most of the NDZs in New York State are of this type.

In the second, EPA, upon application by a state, determines that the protection and enhancement of a water body requires establishment of an NDZ. Unlike the 312(f)(3) NDZ, for a No Discharge Zone established under this provision (commonly known as a 312(f)(4)(A) NDZ), the state does not have to show that adequate pump-out facilities are reasonably available prior to the NDZ designation.

The third and final type applies to drinking water intake zones. In these (commonly known as 312(f)(4)(B) NDZs), EPA, upon application by a state, prohibits the discharge of sewage from vessels within waters identified as a drinking water intake zones. The purpose of this type of NDZ is to safeguard human health. The state does not need to show that adequate pump-out facilities are reasonably available to establish this type of NDZ. A 312(f)(4)(B) NDZ was established for Class A (Water Supply) waters of the Hudson River in 1996.

This last type of NDZ is appropriate for the vast majority of the Lake Erie waters included in this petition. However, in order to address those few areas that are not Class A, and to provide a further basis for this designation, additional information regarding the resources of the Lake, as well as vessel traffic and vessel pumpout facilities have been included.

2.5 Water Quality Assessment

Water quality issues in New York's portion of the Lake Erie watershed are varied, stemming from both non-point and point sources of pollution, and both current and historical uses. The aspects of water quality, the Lake's public drinking water supply profile and the Lake Erie LaMP, have already been discussed above, and the following summary touches on further issues.

Remedial Action Plans (RAPs)

The RAP program was formally adopted in the 1987 amendments to the GLWQA. The Agreement calls for the U.S. and Canadian governments, in cooperation with state and provincial governments, to ensure that RAPs incorporate a systematic and comprehensive ecosystem approach to restoring beneficial uses, and that the public is consulted in all such actions. RAP documents identify pollution sources and outline abatement action plans. Remedial Advisory Committees are appointed to enhance public participation and implementation of the RAP process.

There are two RAP AOCs in the Lake Erie watershed. One, the Niagara River RAP, was completed in September 1994. The second, the Buffalo River RAP, was developed through a partnership between the DEC and the Buffalo River Citizens' Committee, and completed in 1989. In 2003, the Friends of the Buffalo Niagara Rivers, subsequently renamed the Buffalo

Niagara Riverkeeper, received EPA funding for RAP management. Updated status reports for the RAPs are published periodically. Remedial activities in both AOCs have focused on stream water quality, inactive hazardous waste site remediation, contaminated river sediments, point source control, combined sewer overflows, fish and wildlife habitat improvements, and enhanced environmental monitoring activities.

Fish Consumption Advisories

PCB and dioxin contamination have led DOH to issue health advisories for all of Lake Erie, recommending that women of childbearing age and children under the age of 15 eat no more than one meal per month of certain fish species. Less restrictive advisories are in place for other species (smaller chinook salmon, turbot, freshwater drum, lake whitefish, rock bass and yellow perch). Fish consumption is also restricted in other parts of the watershed, including the Niagara River, the New York State Barge Canal, the Buffalo River and Harbor, and Cayuga Creek. These advisories are the result of PCBs and dioxin from toxic/contaminated sediments.

Bathing Beach Closures

Pathogen contamination has affected portions of the Lake Erie shoreline, periodically leading to beach closures when bacteria levels exceed water quality standards for public bathing and other recreational uses. Typically, these closures occur during and after wet-weather events. Urban stormwater runoff areas and, in some cases, overflows from wastewater treatment systems are the most commonly cited contamination sources. Closures occur frequently at Woodlawn State Park Beach, Lake Erie Beach, Hamburg Bathing Beach, Lake Erie State Park Beach, Wright Park Beach, Main Street Beach, Evans Town Park Beach and Wendt Beach.

Urban/Industrial/CSO Runoff

In urban areas throughout the watershed, pollution from industrial, municipal, and commercial sources has affected recreation, aquatic life, and aesthetics. The most significantly affected waterbodies are located in the Buffalo-Niagara Falls area. Urban storm runoff transports a variety of pollutants and debris into the waterways. Combined sewer overflows (CSOs) also convey pollutants to the Niagara River, Buffalo River, Lake Erie and smaller tributaries during wet-weather periods. Contaminated sediments, inactive hazardous waste sites, and other pollutants from past discharges also limit waterbody uses.

Streambank Erosion

General urbanization and development have infringed on the riparian zone of both rivers and lakes in the watershed and caused stream bank erosion. The resulting increase in silt and sediment has affected the quality of the water supply, and its suitability for aquatic life use support or recreation for more than a quarter of the segments listed on the Priority Waterbodies List.

Agricultural Activity

Agricultural activity in the rural areas of the watershed is considerable and has had a detrimental effect on aquatic life support and recreational uses. Agricultural runoff and poor agricultural management practices contribute nutrient and silt/sediment loads to the streams. Specific poor practices include: allowing livestock unrestricted access to stream, improper manure application on fields, intensively cultivated crop lands with little riparian buffer; fertilizer and pesticide

application to fields in the absence of approved nutrient/pesticide management plans; and lack of silage leachate control, manure or milkhouse wastewater treatment facilities. Various state and local agencies are working with the farming community to address these issues.

Failing and/or Inadequate On-site Septic Systems

Failing and/or inadequate on-site septic systems have degraded approximately 300 miles of river and 200 acres of lakewater throughout the watershed are impacted, lessening suitability for aquatic life and recreational uses and raising obvious public health concerns. Correcting individual systems and/or establishing new sewer service for a larger neighborhood or community, however, is a significant (often insurmountable) financial burden for affected parties.

Lake Erie Watershed Water Quality Assessment

The figures on the next page provide an overall assessment of water quality conditions in the Lake Erie watershed (in New York State). For each waterbody type (rivers/streams and Great Lakes shoreline), the first chart shows the percentage of water/shoreline miles that fall into various water quality assessment categories. The red portion of the first pie indicates the percentage of waters characterized as Impaired Segments which do not support appropriate uses. The purple portion represents segments with Minor Impacts and Threatened Waterbody Segments. Taken together, waters in both of these categories (represented by the red and purple segments) comprise the Priority Waterbodies (for that waterbody type) within the basin. The percentage of miles for the other water quality assessment categories – Waterbodies Having No Known Impacts, Unassessed Waterbodies, and Waterbodies with Impacts Needing Verification – are shown in blue, light blue, and green respectively.

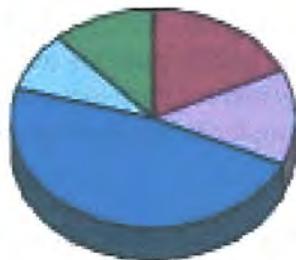
The second pie chart shows the severity of the most significant use impact or restriction for Priority Waterbodies. The levels of severity are:

- Precluded: waters do not support appropriate uses
- Impaired: waters frequently do not support appropriate uses
- Stressed: waters support appropriate uses, but other water quality impacts are apparent
- Threatened: waters support uses with no impacts, but activities threaten future use support

The bar charts indicate the pollutant sources that are most frequently cited as major contributors to the water quality degradation for Priority Waterbodies in the Lake Erie Basin. The charts reflect the percentage of miles/acres of the total waterbody area on the Priority Waterbodies List where the source is listed as a major contributor to the water quality effect. For each source, the color shading of the bar indicates the severity (Precluded, Impaired, Stressed, and Threatened) of the most significant water use impact to the waterbody.

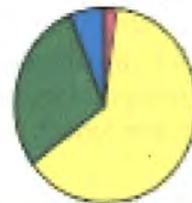
Rivers and Streams Assessment

Water Quality Assessment



- PWL - Not Supporting Uses
- PWL - Supporting/Minor Impacts
- No Known Impacts
- Unassessed Waters
- Impacts Needing Verification

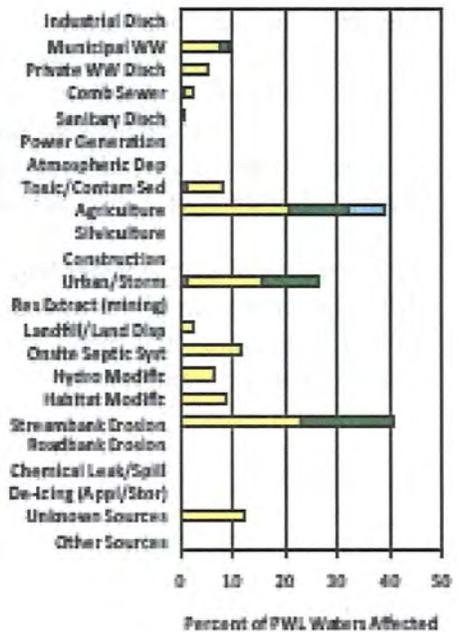
Severity of Impact



- Precluded
- Impaired
- Stressed
- Threatened

Niagara/Erie Basin
 Total Stream Miles: 5,370
 Total PWL Miles: 1,713

Major Sources of Impact



Great Lakes Shoreline Assessment

Water Quality Assessment



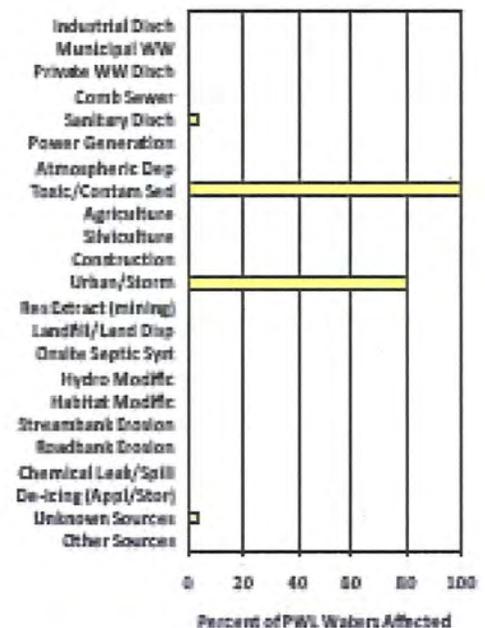
- PWL - Not Supporting Uses
- PWL - Supporting/Minor Impacts
- No Known Impacts
- Unassessed Waters
- Impacts Needing Verification

Severity of Impact

- Precluded
- Impaired
- Stressed
- Threatened

Niagara/Erie Basin
 Total Lake Shore Miles: 84
 Total PWL Shore Miles: 84

Major Sources of Impact



2.6 Greater Protection and Enhancement Certification

The protection and enhancement of the open waters, tributaries, harbors and embayments of the New York State portion of Lake Erie require greater protection than is afforded by applicable federal standards. An NDZ designation covering the waters of the Lake represents one component of a comprehensive approach to water quality management. This wider effort includes initiatives to control point and non-point source pollution, including that associated with municipal discharges, CSOs, and stormwater runoff.

Protecting Lake Erie, a water body of unique natural and economic significance, as well as a drinking water source, warrants this greater level of environmental protection in order to prevent further degradation and speed the overall restoration of the Lake waters and their associated habitats, fisheries, and recreational amenities.

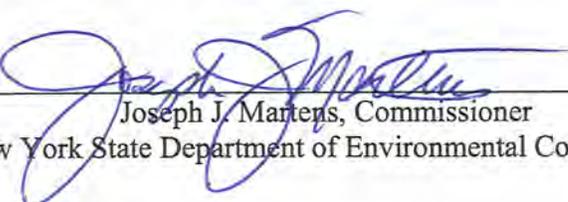
CERTIFICATION

The proposed Vessel Waste No Discharge Zone for the New York State portion of Lake Erie includes the waters of the Lake within the New York State boundary, stretching from the Pennsylvania-New York State boundary to include the upper Niagara River to the Niagara Falls. The proposed No Discharge Zone encompasses approximately 593 square miles and 84 linear shoreline miles, including the navigable portions of the Upper Niagara River and numerous other tributaries and harbors, embayments of the Lake including Barcelona Harbor, Dunkirk Harbor and Buffalo Outer Harbor, and other formally designated habitats and waterways of local, state, and national significance.

As one of the nation's premier waterbodies, Lake Erie supports a remarkable diversity of uses – drinking water supplies, valuable habitats, commercial and recreational boating, and a profusion of recreational resources. The Lake serves as an economic engine for the region, heavily used and enjoyed by the citizens of the many lakeshore communities and throughout the watershed. While Lake Erie is the smallest of the Great Lakes, its watershed is home to approximately one-third of the total population of the Great Lakes basin. The majority – 11 million people – receive their drinking water from Lake Erie, making every improvement to the Lake's water quality a public health imperative. Of all the Great Lakes, Lake Erie is exposed to the greatest stress from urbanization, industrialization and agriculture, but it is also the most biologically productive, because of its shallowness and warmth.

A No Discharge Zone designation will not obviate the need for other water quality improvement efforts. The various state agencies and municipalities with jurisdiction in the Lake Erie Watershed work on many levels – independently and in coordination – to address municipal and industrial point sources of pollution, and non-point source runoff. A No Discharge Zone designation would complement these efforts, not supplant them. Such a designation would, however, have a tangible effect, amplifying the benefits of other resource improvements, and rounding out a comprehensive approach to water quality protection.

In accordance with the requirements set forth in 40 CFR 140.4(a)(1) and on behalf of the State of New York, the Department of Environmental Conservation certifies that the protection and enhancement of the waters described above require greater environmental protection than the applicable federal standard. I certify that to the best of my knowledge all of the above statements are true and factual.



Joseph J. Martens, Commissioner
New York State Department of Environmental Conservation

3. Vessel Population and Usage in Proposed Area

There is no single definitive source of information on the number of boats, or boats with marine sanitation devices (MSD), that frequent Lake Erie. The number and distribution likely fluctuates depending on the time of year, day of the week, weather conditions and special events.

In order to develop a reasonable estimate of recreational vessel population, two major sources of information were consulted. The first was DOS's Clean Vessel Act Plan ("Statewide Plan"), released in 1996. The purpose of the plan was to characterize pumpout adequacy across New York State. From August 1994 to July 1995, DOS surveyed municipalities to gauge public facilities. Many private marina operators were also contacted. Private pumpout and dump station were initially estimated from DEC and New York Sea Grant boating guides, augmented with information on vessel registration, aerial photographs of peak season use, and local plans and studies.

Using data from the Statewide Plan, the estimated number of recreational vessels in each of the counties bordering Lake Erie are as follows:

- Barcelona Harbor (Chautauqua County): 191
- Van Buren Bay (Chautauqua County): Area not heavily used- no data available
- Dunkirk Harbor (Chautauqua County): 310
- Cattaraugus Creek (Chautauqua/Erie Counties): 301
- Brant-Evans (Erie County): 91
- Hamburg (Erie County): No data available
- Buffalo Harbor-Buffalo River (Erie County): 1436

DOS Air Photo Count Total: 2,029

The second information source for recreational boater usage was boater registrations, obtained through the New York State Office of Parks, Recreation and Historic Preservation's 2010 Boating Report (OPRHP Report) for the counties of Erie and Chautauqua (all of which have shoreline on Lake Erie). The OPRHP Report provides a breakdown of the vessel registrations by boat length for each of the counties. This information was used to estimate the number of vessels likely to have MSDs, using guidelines adopted by the EPA (Clean Vessel Act: Pumpout and Dump Station Technical Guidelines, Federal Register Vol. 59, No 47, March 10, 1994). EPA estimated that 20% of boats between 16 and 26 feet, 50% of boats between 26 and 40 feet and all vessels over 40 feet in length have an installed toilet with some type of MSD. Vessels below 16 feet in length are generally presumed not to have an MSD onboard. Applying this guidance to the data in the OPRHP Report yields an estimate of 2,204 vessels with MSDs in the respective counties, all of which, in the interests of conservatism, were assumed to operate in Lake Erie.

Commercial vessel populations were estimated using data from the National Ballast Information Clearinghouse (NBIC), which records ballast water discharge reports for arriving ships³ at the two main commercial ports on Lake Erie, Buffalo and Lackawanna.⁴

³ <http://invasions.si.edu/nbic/search.html>

⁴ A third commercial port, Dunkirk, did not show any arrivals in either 2010 or 2009 so it is not included here.

In calendar year 2010, ballast manifests showed 62 vessels arriving in Buffalo and one in Lackawanna. The majority (58) of these vessels were bulkers, with two passenger ship arrivals and three more listed as “Other.” The single arrival in Lackawanna was also a bulkер. Overall, even at Lake Erie’s busiest commercial port, annual commercial traffic averages little more than one vessel a week.

4. Vessel Waste Discharge Facility Information

4.1 Existing Recreational Pumpouts and Determination of Pumpout to Boat Ratios

The federal Clean Vessel Act of 1992 made grants available to states for construction, replacement, and renovation of recreational vessel pumpouts. New York State applied for the first federal grant in 1994 and initiated a statewide program known as the Clean Vessel Assistance Program (CVAP), managed and administered by EFC. EFC provides three distinct grant programs: CVAP Construction Grants (for new installations or replacement), CVAP Upgrade Grants (improvements to existing pumpouts) and CVAP Operation & Maintenance Grants (annual upkeep of pumpouts). EFC also provides funding for information and education on the benefits, use and availability of pumpouts.

To date, CVAP has helped establish and support 15 pumpout facilities that serve Lake Erie as part of approximately \$619,000 in grants distributed to the Great Lakes region. Nine additional marinas are located along Lake Erie in New York State. Four of these have some level of pumpout facilities, but do not receive CVAP funding so specific pumpout information is not included in this petition. The other 5 marinas represent locations where CVAP funding could support future pumpout facilities; EFC has been or will be reaching out to these marina operators to offer assistance and gauge interest.

The following analysis looks at the availability of services using different scenarios: if only CVAP-funded facilities are considered, if all (CVAP and non-CVAP) pumpout facilities are considered, and if all marinas – including those that may not have pumpouts, but could potentially support pumpout facilities – are considered. Using only the CVAP-funded facilities (detailed in Appendix 3) is the most conservative approach.

Table 2: Recreational Pumpout Availability by County

County	CVAP-Funded Pumpouts	Non-CVAP Funded Pumpouts	Other Marinas (potential pumpouts)
<i>Erie</i>	14	1	1
<i>Chautauqua</i>	1	3	4
Total Pumpouts:	15	4	5



Figure 1 - Pumpouts/Marinas Serving Lake Erie

Table 3: Ratio of Pumpout Facilities to Recreational Boats by County Based on Statewide Plan

County	Pumpout to Boat Ratios		
	CVAP-funded Pumpouts	CVAP & non-CVAP Pumpouts	All Marinas (includes potential pumpouts)
Erie	14:1,527 (1:109)	15:1,527 (1:102)	16:1,527 (1:95)
Chautauqua	1:802 (1:802)	4:802 (1:201)	8:802 (1:101)
Total All Counties:	15:2,329 or 1:155	19:2,329 or 1:123	24:2,329 or 1:97

Table 5: Pumpouts to Boats Ratio Based on 2010 Recreational Boater Registrations and EPA MSD Guidance*

**Erie and Chautauqua Counties*

Pumpouts to Boats (w/MSD) CVAP Funded Pumpouts only	Pumpouts to Boats (w/MSD) CVAP & non-CVAP Funded Pumpouts
15:2,204 or 1:147	19:2,204 or 1:116

This analysis shows that overall within the proposed Lake Erie NDZ there are an adequate number of pumpout facilities along Lake Erie to support an NDZ, with pumpout-to-boat ratios of 1:147 (most conservative) and as low as 1:116 in non-CVAP funded facilities are taken into account. The northern portion of Lake Erie within New York (Erie County) has a greater concentration of both pumpout facilities and vessel population. Here the ratio of pumpouts-to-boats is just over 1:100. In the southern portion of the Lake (Chautauqua County) the ratio is not as high. When only CVAP-funded pumpouts are counted, the ratio is about 1:800; when non-CVAP funded pumpouts are included, the ratio is about 1:200. Although the overall ratio of pumpouts-to-boats falls below the minimum ratio of 1:300 (and well below the upper ratio of 1:600) used to determine adequacy of pumpout facilities, additional pumpout facilities in the southern end portion would better balance the availability of facilities for boaters. EFC will continue to reach out to marina operators – particularly in this southern end portion – to offer available CVAP funding for additional facilities to support the NDZ designation.

4.2 Commercial Vessel Pumpouts

A call for additional information regarding current practices and the impact of establishing an NDZ in Lake Erie was posted on the DEC website, Environmental Notice Bulletin and sent out to some targeted commercial boating organizations. Representatives of the Port of Buffalo indicated that although there are no fixed pumpout facilities for commercial vessels at the port, the port operators do contact septic waste haulers upon request to service vessels at the port. This approach has been adequate to meet needs of commercial vessels.

Based on the low level of commercial vessel traffic at Lake Erie ports and the transience of these vessels, it appears that the availability of septic hauler pumpout trucks would provide more than adequate pumpout capacity for commercial vessels.

4.4 Summary

One option to designate a waterbody as an NDZ requires that there be an adequate number of pumpout facilities to support the designation. Typically, one pumpout facility for every 300–600 boats (w/ MSDs) is considered adequate. As discussed above, the recreational vessel population was estimated using two sources of information: DOS’s Clean Vessel Act Plan and 2010 boater registrations (adjusted, using EPA guidance, to account for vessels likely to have an MSD). Additionally, the number of pumpout facilities was calculated in a number of ways. The most conservative approach uses just CVAP funded pumpout facilities. These are the facilities for which pumpout facility information (see appendix 3) is readily available. Other calculations included non-CVAP funded facilities, and an estimate that also included marinas where future pumpouts could be located. Table 6 compares estimates of boat counts from both data sources and compares these to both the number of CVAP funded pumpouts and to the number of CVAP and non-CVAP funded pumpouts. The table contains the resulting pumpout to boat ratios.

**Table 6: Summary Table
of Ratios of Pumpouts to Recreational Boats on Lake Erie**

Boat Count Source	Pumpouts to Boats	
	CVAP Funded Pumpouts only	CVAP & non-CVAP Funded
<i>Statewide Plan</i>	1:155	1:123
<i>NYS 2010 Boater Registrations</i>	1:147	1:116

By any of the various methods reflected in Table 6, there are currently sufficient pumpout facilities to meet the upper/maximum 1:600 ratio. In fact, the ratios fall well below the lower/minimum 1:300 ratio used to determine adequacy of pumpout facilities.

5. Other Information

5.1 Enforcement

Once the EPA has determined that the waterbody meets the criteria for an NDZ, or contains an adequate number of pumpouts, the water body is automatically a State-designated NDZ, pursuant to Section 3-33(e)(1) of the New York State Navigation Law. Within the State-designated NDZ, discharges from marine toilets are prohibited and marine sanitation devices on board vessels must be secured to prevent discharges.

This statute may be enforced by any police officer or peace officer acting pursuant to their special duties, including New York State Police, Environmental Conservation Police, State Park Police, Navigation Inspectors, and local Police Officers, Harbor Masters and Bay Constables. In practice, Town Harbormasters and Bay Constables are expected to be the primary contact with local boaters for enforcement of the NDZ.

Pursuant to Section 3-33(c)(10) of the New York State Navigation Law, where State designated vessel waste NDZs have been established, a municipality may adopt and enforce local laws prohibiting the discharge of vessels wastes in such waters within the municipality, or in such waters adjacent to the municipality to a distance of 1,500 feet from the shore. Either State statute or local law may be enforced by State or local police or peace officers.

5.2 Public Education/Information Plan

As part of instituting an NDZ, state agencies will coordinate with local municipalities and environmental groups to launch a public education program for boaters emphasizing the advantages of clean, attractive waters for local users and visitors alike. Materials will emphasize best management practices to protect and improve water quality, including locations and procedures for using pumpout equipment and maintaining MSDs and bilge systems.

This coordinated NDZ educational program will encourage use of onshore facilities for laundry, dishwashing, showers and hygiene. Through CVAP, NYSEFC will provide signs and brochures to educate the public regarding the benefits, use, and availability of pumpouts. Online maps are provided on NYSEFC's website. They include Google maps of pumpout locations and marina sheets that provide boaters with detailed availability information.

The CVAP Information & Education (I&E) Grants provide assistance for municipalities and not-for-profit organizations to produce a wide variety of outreach materials for boaters and the general public regarding pumpouts. These grants, along with NYSEFC's administrative use of I&E funds, will supplement outreach regarding NDZs.

Once the NDZ designation is established, the CVAP will produce signs to alert boaters that pumpout use is required for disposal of septic waste and where to get additional information.

APPENDIX 1
NEW YORK STATE SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS ON
LAKE ERIE SHORELINE

Chautauqua County (6)

- Canadaway Creek
- Cattaraugus Creek
- Chautauqua Creek
- Dunkirk Harbor
- Silver Creek and Walnut Creek
- Van Buren Point

Erie County (12)

- Big Sister Creek
- Buckhorn Island Tern Colony
- Buckhorn Island Wetlands
- Eighteen Mile Creek - Lake Erie
- Grand Island Tributaries
- North Buffalo Harbor
- Seneca Shoals
- Small Boat Harbor - Buffalo
- Smoke Creek Shoals
- Strawberry Island - Motor Island Shallow
- Tiff Farm Nature Preserve
- Times Beach Diked Disposal Area

APPENDIX 2
RECREATIONAL SITES ON LAKE ERIE SHORELINE

Erie County

Niagara Reservation State Park

Buckhorn Island State Park

Beaver Island State Park

Tifft Nature Preserve

Wendt Beach County Park

Evangola State Park

Chautauqua County

Lake Erie State Park

**APPENDIX 3
MARINA DATA SHEETS**

Marina Name	City of Dunkirk - Municipal Dock
Waterbody	Dunkirk Harbor
Latitude	42.48919
Longitude	-79.3361
Phone Number	716-366-9882
VHF Channel	None
Dates of Operation	April - November 15
Hours of Operation	6 AM - 6 PM
Pumpout Services	Pumpout Station - Stationary
Facility Fee	\$5
Water Depth	6' - 7'
Max. Vessel Length	80'
Pumpout Capacity	N/A
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	Niagara Frontier Trans. Auth. - Small Boat Harbor - Replacement
Waterbody	Buffalo Harbor and Buffalo River
Latitude	42.86
Longitude	-78.875
Phone Number	716-855-7230
VHF Channel	16 & 68
Dates of Operation	May 15 - October 15
Hours of Operation	7:00 am - 10:30 pm
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$0
Water Depth	6 - 8'
Max. Vessel Length	50'
Pumpout Capacity	n/a
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	RCR Yachts Skyway Marina
Waterbody	Buffalo Harbor and Buffalo River
Latitude	42.87006
Longitude	-78.8771
Phone Number	716-856-6314
VHF Channel	None
Dates of Operation	April 1 - November 30
Hours of Operation	8:30 AM - 5:30 PM
Pumpout Services	Pumpout Station – Portable
Facility Fee	\$5
Water Depth	12'
Max. Vessel Length	45'
Pumpout Capacity	1,000 gallons
Disposal/Treatment	HOLDING TANK
Restrooms	YES

Marina Name	City of Buffalo - Erie Basin Marina
Waterbody	Buffalo Harbor and Buffalo River
Latitude	42.88423
Longitude	-78.8897
Phone Number	716-851-5389
VHF Channel	16
Dates of Operation	May 1 - October 15
Hours of Operation	7 AM - 7 PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$6.50
Water Depth	10'
Max. Vessel Length	50'
Pumpout Capacity	N/A
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	Rich Marine Sales, Inc.
Waterbody	Buffalo Harbor and Buffalo River
Latitude	42.93727
Longitude	-78.9074
Phone Number	716-873-4060
VHF Channel	None
Dates of Operation	May 1 - November 1
Hours of Operation	9 AM - 5 PM
Pumpout Services	Pumpout Station – Portable
Facility Fee	\$5
Water Depth	6'
Max. Vessel Length	50'
Pumpout Capacity	N/A
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	Harbour Place Marine Sales, Inc.
Waterbody	Buffalo Harbor and Buffalo River
Latitude	42.9431
Longitude	-78.9094
Phone Number	716-876-5944
VHF Channel	None
Dates of Operation	April 15 - October 31
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$5
Water Depth	12'
Max. Vessel Length	Unlimited
Pumpout Capacity	N/A
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	NYSOPRHP - Beaver Island State Park Transient M
Waterbody	Grand Island
Latitude	42.95885
Longitude	-78.9546
Phone Number	716-278-1775
VHF Channel	None
Dates of Operation	May 15 - October 15
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$5
Water Depth	10'
Max. Vessel Length	36'
Pumpout Capacity	N/A
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	Blue Water Marine
Waterbody	Grand Island
Latitude	42.97095
Longitude	-78.9435
Phone Number	716-773-7884
VHF Channel	None
Dates of Operation	May 1 - November 1
Hours of Operation	9 AM - 7 PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$0
Water Depth	5'
Max. Vessel Length	70'
Pumpout Capacity	60 gallons
Disposal/Treatment	n/a
Restrooms	YES

Marina Name	Mid River Marina, Inc.
Waterbody	Tonawanda Creek
Latitude	42.97349
Longitude	-78.9363
Phone Number	716-875-7447
VHF Channel	None
Dates of Operation	April 1 - September 30
Hours of Operation	9 AM - 6 PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$5
Water Depth	5'
Max. Vessel Length	60'
Pumpout Capacity	N/A
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	Collins Marine, Inc.
Waterbody	Tonawanda Creek
Latitude	42.99538
Longitude	-78.9342
Phone Number	716-875-6000
VHF Channel	N/A
Dates of Operation	April 1 - November 1
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$5
Water Depth	6'
Max. Vessel Length	50'
Pumpout Capacity	None
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	The Shores/Placid Harbor Marina - Tonawanda Marine Develop Corp.
Waterbody	Tonawanda Creek
Latitude	43.02395
Longitude	-78.8844
Phone Number	716-625-8235
VHF Channel	16
Dates of Operation	April 15 - October 15
Hours of Operation	9 AM - 9 PM
Pumpout Services	Pumpout Station – Portable
Facility Fee	\$5
Water Depth	12'
Max. Vessel Length	Unlimited
Pumpout Capacity	N/A
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	Niagara River Yacht Club
Waterbody	Tonawanda Creek
Latitude	43.02925
Longitude	-78.8813
Phone Number	716-693-2882
VHF Channel	16
Dates of Operation	May 1 - November 1
Hours of Operation	Dusk - Dawn
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$3
Water Depth	
Max. Vessel Length	
Pumpout Capacity	
Disposal/Treatment	
Restrooms	

Marina Name	Smith Boys of North Tonawanda - Upgrade
Waterbody	Tonawanda Creek
Latitude	
Longitude	
Phone Number	716-695-3472
VHF Channel	None
Dates of Operation	April - November
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$0
Water Depth	8'
Max. Vessel Length	No limit specified
Pumpout Capacity	No limit specified
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	East Pier Marina, Inc.
Waterbody	Tonawanda Creek
Latitude	43.03402
Longitude	-78.886
Phone Number	716-693-6604
VHF Channel	16
Dates of Operation	May 1 - November 15
Hours of Operation	9 AM - 8 PM
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$5
Water Depth	5'
Max. Vessel Length	70'
Pumpout Capacity	N/A
Disposal/Treatment	MUNI SYSTEM
Restrooms	YES

Marina Name	NYSOPRHP - Big Six Mile Creek State Marina
Waterbody	Grand Island
Latitude	43.0229
Longitude	-79.0117
Phone Number	716-278-1775
VHF Channel	None
Dates of Operation	May 1 - November 1
Hours of Operation	24 Hours
Pumpout Services	Pumpout Station – Stationary
Facility Fee	\$5
Water Depth	10'
Max. Vessel Length	30'
Pumpout Capacity	N/A
Disposal/Treatment	ON SITE
Restrooms	YES

Map of Lake Erie No-Discharge Zone Area (New York State), with Northeast Limit Inset



Reasons Supporting This Determination:

(See 617.6(g) for requirements of this determination; see 617.6(h) for Conditional Negative Declaration)

See Attachment 2

If Conditioned Negative Declaration, provide on attachment the specific mitigation measures imposed.

For Further Information:

Contact Person: Jeffrey A. Myers, Bureau of Water Assessment and Management
Address: New York State Department of Conservation,
625 Broadway, 4th Floor
Albany, NY 12233-3502
Telephone Number: 518-402-8179

For Type I Actions and Conditioned Negative Declarations, a Copy of this Notice Sent to:

Commissioner, Department of Environmental Conservation
625 Broadway, Albany, NY 12233-0001

Appropriate Regional Office of the Department of Environmental Conservation.
Office of the Chief Executive Officer of the political subdivision in which the action will be principally located.

Applicant (if any)

Other involved agencies (if any)

617.20

State Environmental Quality Review
SHORT ENVIRONMENTAL ASSESSMENT FORM
For UNLISTED ACTIONS only

Part I - PROJECT INFORMATION (to be completed by Applicant or Project sponsor)

1. APPLICANT/SPONSOR

PROJECT NAME

NYS Department of Environmental Conservation Designation of a Vessel Waste No-Discharge Zone for the open waters, tributaries, harbors and embayments in New York State's portion of Lake Erie.

3. PROJECT LOCATION:

The New York State portion of Lake Erie includes the waters of the Lake within the New York State boundary, stretching from the Pennsylvania-New York State boundary to include the upper Niagara River to the Niagara Falls. The proposed No Discharge Zone encompasses approximately 593 square miles and 84 linear shoreline miles, including the navigable portions of the Upper Niagara River and numerous other tributaries, harbors, and embayments of the Lake including Barcelona Harbor, Dunkirk Harbor and Buffalo Outer Harbor, and encompassing portions of Chautauqua, Erie and Niagara Counties. See attached map.

4. PRECISE LOCATION (Street address, and road intersection, prominent landmarks, etc., or provide map)
See attached map.

5. IS PROPOSED ACTION:

New Expansion Modification/Alteration

6. DESCRIBE PROJECT BRIEFLY:

Designation of a Vessel Waste No-Discharge Zones pursuant to the NYS Navigation Law. DEC certification of need for greater environmental protection in an area than is currently provided by federal regulation is necessary before vessel waste No-Discharge Zone designation can be submitted to USEPA for approval. USEPA must determine whether there are sufficient vessel waste pumpout or dump station facilities for vessels using this area prior to designation of the area as a Vessel Waste No-Discharge Zone. Additional information is contained in the Application for No-Discharge Zone Designation for Lake Erie (attached).

7. AMOUNT OF LAND AFFECTED

Initially: about 593 Sq. Mi.* Ultimately: about 593 Sq. Mi.*
* approximately 593 sq.mi. of open water and 84 miles of lake shoreline.

8. WILL PRESENT ACTION COMPLY WITH EXISTING ZONING OR OTHER EXISTING LAND USE RESTRICTIONS?

Yes No If No, describe briefly

9. WHAT IS PRESENT LAND USE IN VICINITY OF PROJECT?

Residential Industrial Commercial Agricultural Park/Forest/Open Space Other
Describe: Mixed use; additional information in attached application.

10. DOES ACTION INVOLVE A PERMIT APPROVAL, OR FUNDING, NOW OR ULTIMATELY FROM ANY OTHER GOVERNMENTAL AGENCY (FEDERAL, STATE OR LOCAL)?

Yes No If yes, list agency(s) and permit/approvals

Concurrence from USEPA under provisions of Clean Water Act.

11. DOES ANY ASPECT OF THE ACTION HAVE A CURRENT VALID PERMIT OR APPROVAL?

Yes No If yes, list agency(s) and permit/approvals:

12. AS A RESULT OF THE PROPOSED ACTION WILL EXISTING PERMIT/APPROVAL REQUIRE MODIFICATION?

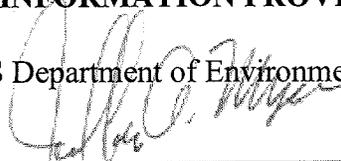
Yes No

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE

Applicant name: NYS Department of Environmental Conservation

Date: 06/29/2012

Signature:



IF THE ACTION IS IN THE COASTAL AREA, AND YOU ARE A STATE AGENCY, COMPLETE THE COASTAL ASSESSMENT FORM BEFORE PROCEEDING WITH THIS ASSESSMENT OVER

PART II - ENVIRONMENTAL ASSESSMENT (To be completed by Agency)

A. DOES ACTION EXCEED ANY TYPE I THRESHOLD IN 6 NYCRR, PART 617.4? If yes, coordinate the review process and use the FULL EAF.

Yes No

B. WILL ACTION RECEIVE COORDINATED REVIEW AS PROVIDED FOR UNLISTED ACTIONS IN 6 NYCRR, PART 617.6? If No, a negative declaration may be superseded by another agency.

Yes No

C. COULD ACTION RESULT IN ANY ADVERSE EFFECTS ASSOCIATED WITH THE FOLLOWING: (Answers may be handwritten, if legible)

- C1. Existing air quality, surface or groundwater quality or quantity, noise levels, existing traffic patterns, solid waste production or disposal, potential for erosion, drainage or flooding problems? Explain briefly: **No adverse effect. Water quality improvement/enhancement is likely.**
- C2. Aesthetic, agricultural, archaeological, historic, or other natural or cultural resources; or community or neighborhood character? Explain briefly: **No adverse effect. Water quality improvement/ enhancement is likely.**
- C3. Vegetation or fauna, fish, shellfish or wildlife species, significant habitats, or threatened or endangered species? Explain briefly: **No adverse effect. Water quality improvement/ enhancement is likely.**
- C4. A community's existing plans or goals as officially adopted, or a change in use or intensity of use of land or other natural resources? Explain briefly: **No; plan is consistent with long-range goals in Local Waterfront Revitalization Programs.**
- C5. Growth, subsequent development, or related activities likely to be induced by the proposed action? Explain briefly: **Not specifically.**
- C6. Long term, short term, cumulative, or other effects not identified in C1-C5? Explain briefly: **No.**
- C7. Other impacts (including changes in use of either quantity or type of energy)? Explain briefly: **None.**

D. WILL THE PROJECT HAVE AN IMPACT ON THE ENVIRONMENTAL CHARACTERISTICS THAT CAUSED THE ESTABLISHMENT OF A CEA?

Yes No

E. IS THERE, OR IS THERE LIKELY TO BE CONTROVERSY RELATED TO POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS?

Yes No If yes, explain briefly

PART III - DETERMINATION OF SIGNIFICANCE (To be completed by Agency)

INSTRUCTIONS: For each adverse effect identified above, determine what is substantial, large, important or otherwise significant. Each effect should be assessed in connection with its (a) setting (i.e. urban or rural); (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude. If necessary, add attachments or reference supporting materials. Ensure that explanations contain sufficient detail to show that all relevant adverse impacts have been identified and adequately addressed. If question D of Part II was checked yes, the determination of significance must evaluate the potential impact of the proposed action on the environmental characteristics of the CEA.

- Check this box if you have identified one or more potentially large or significant adverse impacts which **MAY** occur. Then proceed directly to the FULL EAF and/or prepare a positive declaration.
- Check this box if you have determined, based on the information and analysis above and any supporting documentation, that the proposed action **WILL NOT** result in any significant adverse environmental impacts **AND** provide on attachments as necessary, the reasons supporting this determination.

NYS Department of Environmental Conservation
Name of Lead Agency

Jeffrey A. Myers
Print or Type Name of Responsible Officer in Lead Agency

Director, Water Asmt & Mgmt
Title of Responsible Officer

Signature of Responsible Officer in Lead Agency Signature of Preparer (if different from responsible officer)

06/29/2012

Date

Attachment 1

DESCRIPTION OF ACTION

Lake Erie Vessel Waste No Discharge Zone Designation

The New York State Department of Environmental Conservation (NYSDEC) in collaboration with the New York Department of State and the New York State Environmental Facilities Corporation has prepared an application for the designation of a Vessel Waste No-Discharge Zone in the waters of the New York Portion of Lake Erie. The proposed Vessel Waste No Discharge Zone for the New York State portion of Lake Erie includes the waters of the Lake within the New York State boundary, stretching from the Pennsylvania-New York State boundary to include the upper Niagara River to the Niagara Falls. The proposed No Discharge Zone encompasses approximately 593 square miles and 84 linear shoreline miles, including the navigable portions of the Upper Niagara River and numerous other tributaries and harbors, embayments of the Lake including Barcelona Harbor, Dunkirk Harbor and Buffalo Outer Harbor, and other formally designated habitats and waterways of local, state, and national significance. It is the intent of DEC to now submit this application to the Environmental Protection Agency (EPA) for consideration.

Discharges of human waste from boats can contribute to the presence of pathogens (disease-causing micro-organisms such as bacteria or viruses) and other pollutants in waterbodies. Vessel waste discharges are regulated by the Federal Clean Vessel Act.

The Clean Water Act permits Vessel Waste No Discharge Zone designations, pursuant to Section 312(f), where the State has determined greater environmental safeguards are warranted to protect the quality of particularly sensitive waterbodies and vessel waste pumpout and dump station facilities in the area are sufficient for the type and number of vessels using the area. Section 312(f)(3) provides:

....if any State determines that the protection and enhancement of the quality of some or all of the waters within such State require greater environmental protection, such State may completely prohibit the discharge from all vehicles of any sewage, whether treated or not, into such waters, except that no such prohibition shall apply until the EPA Administrator determines that adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels are reasonably available....

Section 140.4 of volume 40 of the Code of Federal Regulations sets out the details of what is required to comply with Section 312(f). More specifically, Section 140.4(a)(1)-(7) requires that the application contain the following:

- (1) A certification that the protection and enhancement of the waters described in the petition require greater environmental protection than the applicable federal standard;
- (2) A map showing the location of commercial and recreational pumpout facilities;
- (3) A description of the location of pumpout facilities within waters designated for no-discharge;
- (4) The general schedule of operating hours of the pumpout facilities;
- (5) The draught requirements on vessels that may be excluded because of insufficient water depth adjacent to the facility;
- (6) Information indicating that treatment of wastes from such pumpout facilities is in conformance with federal law; and
- (7) Information on vessel population and vessel usage of the subject waters.

The 1995 amendments to the State Navigation Law automatically establish State Vessel Waste No Discharge Zones upon Federal EPA approval. This legislation prohibits the discharge of vessel wastes into waters designated as Vessel Waste No Discharge Zones. Municipalities located within or adjacent to these areas are also authorized by the legislation to adopt and enforce laws prohibiting discharges of vessel wastes within these jurisdictions.

The DEC previously submitted to EPA petitions for a Vessel Waste No-Discharge Zones for Lake George (1975), Lake Champlain (1976), Mamaroneck Harbor (1997), the Hudson River (1999), Greater Huntington-Northport Bay Complex (2000), Port Jefferson Harbor Complex (2001), the Peconic Estuary (2002), Oyster Bay/Cold Spring Harbor (2008), Hempstead Harbor (2008) and the South Shore Estuary Reserve (2009), the waters of the New York State Canal System (2010), Long Island Sound (2011), Jamaica Bay (2011) and Lake Ontario (2011).

Attachment 2
REASONS SUPPORTING THIS DETERMINATION

Lake Erie Vessel Waste No-Discharge Zone Designation

The designation of a Vessel Waste No-Discharge Zone for the open waters, tributaries, harbors and embayments in New York State's portion of Lake Erie will not have a significant adverse effect on the environment, upon evaluation of the criteria in Part 617.11 (a) of the State Environmental Quality Review regulations. On the contrary, beneficial effects upon the water quality and natural resources Lake Erie may be anticipated as a result of this designation.

As one of the nation's premier waterbodies, Lake Erie supports a remarkable diversity of uses – drinking water supplies, valuable habitats, commercial and recreational boating, and a profusion of recreational resources. The Lake serves as an economic engine for the region, heavily used and enjoyed by the citizens of the many lakeshore communities and throughout the watershed. While Lake Erie is the smallest of the Great Lakes, its watershed is home to approximately one-third of the total population of the Great Lakes basin. The majority – 11 million people – receive their drinking water from Lake Erie, making every improvement to the Lake's water quality a public health imperative. Of all the Great Lakes, Lake Erie is exposed to the greatest stress from urbanization, industrialization and agriculture, but it is also the most biologically productive, because of its shallowness and warmth.

A No Discharge Zone designation will not obviate the need for other water quality improvement efforts. The various state agencies and municipalities with jurisdiction in the Lake Erie Watershed work on many levels – independently and in coordination – to address municipal and industrial point sources of pollution, and non-point source runoff. A No Discharge Zone designation would complement these efforts, not supplant them. Such a designation would, however, have a tangible effect, amplifying the benefits of other resource improvements, and rounding out a comprehensive approach to water quality protection.

NEW YORK STATE DEPARTMENT OF STATE
COASTAL MANAGEMENT PROGRAM

Coastal Assessment Form

A. INSTRUCTIONS (Please print or type all answers.)

1. State agencies shall complete this CAF for proposed actions that are subject to Part 600 of Title 19 of the NYCRR. This assessment is intended to supplement other information used by a state agency in making a determination of significance pursuant to the State Environmental Quality Review Act (see 6 NYCRR, Part 617). If it is determined that a proposed action will not have a significant effect on the environment, this assessment is intended to assist a state agency in complying with the certification requirements of 19 NYCRR, Section 600.4.
2. If any question in Section C on this form is answered "Yes," then the proposed action may affect the achievement of the coastal policies contained in Article 42 of the Executive Law. Thus, the action should be analyzed in more detail and, if necessary, modified prior to either (a) making a certification of consistency pursuant to 19 NYCRR, Part 600, or (b) making the findings required under SEQRA, 6 NYCRR, Section 617.11, if the action is one for which an environmental impact statement is being prepared. If an action cannot be certified as consistent with the coastal policies, it shall not be undertaken.
3. Before answering the questions in Section C, the preparer of this form should review the coastal policies contained in 19 NYCRR, Section 600.5. A proposed action should be evaluated as to its significant beneficial and adverse effects upon the coastal area.

B. DESCRIPTION OF PROPOSED ACTION

1. Type of state agency action (check appropriate response):
 - (a) Directly undertaken (e.g., capital construction, planning activity, agency regulation, land transaction) _____
 - (b) Financial assistance (e.g., grant, loan, subsidy) _____
 - (c) Permit, license, certification X
2. Describe nature and extent of action: Designation of a Vessel Waste No Discharge Zone for the open waters, tributaries, harbors and embayments in New York State's portion of Lake Erie, encompassing multiple municipalities in portions of Chautauqua, Erie and Niagara Counties.
3. Location of action:

<u>Multiple counties</u>	<u>multiple municipalities, see description above</u>	
County	City, Town, or Village	Street or Site Description
4. If an application for the proposed action has been filed with the state agency, the following information shall be provided:
 - (a) Name of Applicant: NYS Department of Environmental Conservation
 - (b) Mailing Address: 625 Broadway, Albany, NY 12233-3502
 - (c) Telephone Number: 518-402-8179
 - (d) State Agency Application Number: n/a
5. Will the action be directly undertaken, require funding, or approval by a federal agency?
 Yes X No _____ If yes, which federal agency? US Environmental Protection Agency

C. COASTAL ASSESSMENT (Check either "Yes" or "No" for each of the following questions.)

- | | <u>Yes</u> | <u>No</u> |
|---|------------|------------|
| 1. Will the proposed activity be located in, or contiguous to, or have a <u>significant effect</u> upon any of the resource areas identified on the coastal area map: | | |
| (a) Significant fish or wildlife habitats? Action to benefit these resources | <u> X </u> | _____ |
| (b) Scenic resources of statewide significance? | _____ | <u> X </u> |
| (c) Important agricultural lands? | _____ | <u> X </u> |
| 2. Will the proposed activity have a <u>significant effect</u> upon: | | |
| (a) Commercial or recreational use of fish and wildlife resources? Action to benefit these resources | <u> X </u> | _____ |
| (b) Scenic quality of the coastal environment? Action to benefit these resources | <u> X </u> | _____ |
| (c) Development of future or existing water-dependent uses? Action to benefit these resources | <u> X </u> | _____ |
| (d) Operation of the state's major ports? | _____ | <u> X </u> |
| (e) Land and water uses within the state's small harbors? Action to benefit these resources | <u> X </u> | _____ |
| (f) Existing or potential public recreation opportunities? Action to benefit these resources | <u> X </u> | _____ |
| (g) Structures, sites, or districts of historic, archaeological, or cultural significance to the State or nation? | _____ | <u> X </u> |

3. Will the proposed activity involve or result in any of the following:

- (a) Physical alteration of two (2) acres or more of land along the shoreline, land under water, or coastal waters? X
- (b) Physical alteration of five (5) acres or more of land located elsewhere in the coastal area? X
- (c) Expansion of existing public services of infrastructure in undeveloped or low density areas of the coastal area? X
- (d) Energy facility not subject to Article VII or VIII of the Public Service Law? X
- (e) Mining, excavation, filling or dredging in coastal waters? X
- (f) Reduction of existing or potential public access to or along the shore? X
- (g) Sale or change in use of state-owned lands located on the shoreline or under water? X
- (h) Development within a designated flood or erosion hazard area? X
- (i) Development on a beach, dune, barrier island or other natural feature that provides protection against flooding or erosion? X

4. Will the proposed action be located in or have a significant effect upon an area included in an approved Local Waterfront Revitalization Program? **Action to benefit these areas** X

D. CONSISTENCY DETERMINATION/CERTIFICATION (Complete this section if any of the above questions is answered "Yes".)

Enter (1) or (2): 1

- 1. Project will not substantially hinder the achievement of any coastal policy or purpose and, whenever practicable, will advance coastal policies.
- 2. Project will substantially hinder the achievement of any coastal policy or purpose, but no reasonable alternatives exist, the project minimizes all adverse effects, the project advances one or more other coastal policies, and the project results in an overriding regional or statewide regional benefit.

Enter analysis of the consistency of the project: The project will not substantially hinder the achievement of any coastal policy or purpose and will advance coastal policies relating to water quality, Significant Coastal Fish and Wildlife Habitats and other natural resources, commercial and recreational fishing and access and recreation.
See attached Coastal Consistency Certification.

E. SUBMISSION REQUIREMENTS

If any question in Section C is answered "Yes" AND either of the following two conditions is met:

Section B.1(a) or B.1(b) is checked, or
Section B.1(c) is checked AND B.5 is answered "Yes";

THEN one copy of the completed Coastal Assessment Form shall be submitted to the following address:

New York State Department of State
Division of Coastal Resources and Waterfront Revitalization
41 State Street, 8th Floor
Albany, New York 12231

If assistance or further information is needed to complete this form, please call the Department of State at (518) 474-6000.

F. REMARKS OR ADDITIONAL INFORMATION

Designation and enforcement of a vessel waste no-discharge zone is expected to improve water quality and therefore result in positive impacts to natural resources, including aquatic resources and habitats, public access and recreational opportunities and enhancement of economic development associated with these resources and their use, including commercial and marina operation.

See attached certification.

Preparer's Name: Jeffrey A. Myers, P.E. Telephone Number: 518-402-8179
(Please print or type)

Title: Director, Water Asmt & Mgmt Agency: NYS - Department of Environmental Conservation Date: 6/29/2012

COASTAL CONSISTENCY CERTIFICATION

Project Name: Lake Erie Vessel Waste No-Discharge Zone Certification

Project Location:

The proposed Lake Erie Vessel Waste No-Discharge Zone includes the open waters, tributaries, harbors and embayments New York State's portion of Lake Erie. These waters encompass portions of Chautauqua, Erie and Niagara Counties. See attached map.

I have determined that:

- ☒ the project will not substantially hinder the achievement of any coastal policy or purpose and will advance coastal policies relating to water quality, Significant Coastal Fish and Wildlife Habitats and other natural resources, commercial and recreational fishing and access and recreation.

COMMENTS:

Review of the No-Discharge Zone Designation application prepared by the NYS Department of Environmental Conservation indicates that this certification will be consistent with and advance the New York State Coastal Policies 4, 7, 8, 9, 19, 21, 33, 34, 37, and 44, similar policies and purposes of State and federally approved Local Waterfront Revitalization Programs as components of the Coastal Management Program, State coastal policies in Article 42 of the Executive Law and 19NYCRR Part 600.5 and the State's federally approved Clean Vessel Act Plan which identifies the need for such designation and was developed to be consistent with and advance the State's Coastal Management Program and its applicable policies.

PREPARED BY:

Jeffrey A. Myers, Director, Bureau of Water Assessment and Management
New York State Department of Environmental Conservation
625 Broadway, Albany

DATE: June 29, 2012

Copy to: File
DOS Division of Coastal Resources

